

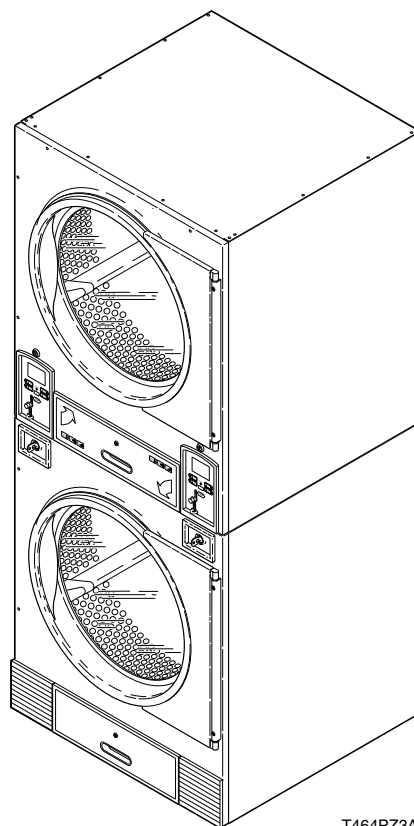
# Drying Tumblers

Stacked 30 Pound Capacity

Stacked 45 Pound Capacity

Starting Serial No. 0602004144

Refer to Page 5 for Model Numbers



T464PZ3A

Troubleshooting



# Table of Contents


<b>Section 1 – Safety Information .....</b>	<b>3</b>
Locating an Authorized Service Person .....	5
Safety Warnings and Decals.....	5
Safety Precautions for Servicing Tumblers .....	5
<b>Section 2 – Introduction .....</b>	<b>6</b>
Model Identification .....	6
Serial Plate Location.....	7
Customer Service.....	7
Wiring Diagram.....	7
How A Tumbler Works .....	8
<b>Section 3 – Troubleshooting.....</b>	<b>9</b>
1. Tumbler Does Not Start .....	10
2. Motor Does Not Start.....	11
3. Motor Overload Protector Cycles Repeatedly .....	12
4. Motor Runs But Cylinder Does Not Turn.....	13
5. Motor Does Not Stop .....	14
6. Burner Does Not Ignite .....	15
7. Burner Ignites and Goes Out Repeatedly.....	18
8. Burner Does Not Shut Off .....	19
9. Clothes Do Not Dry .....	20
10. Tumbler Overheating .....	22
11. Burner Not Burning Properly.....	23
12. Loading Door Opens During Operation.....	24
13. Cylinder Continues to Spin with Door Open .....	25
14. Coin Does Not Fall into Coin Vault or Coin Drop Sensor Does Not Register That Coin Has Been Entered.....	26
<b>Section 4 – Adjustments .....</b>	<b>27</b>
15. Loading Door Switch .....	27
16. Loading Door Strike.....	27
<b>Section 5 – Micro Display Control (MDC) Troubleshooting.....</b>	<b>28</b>
<b>Models with BC, BG, BL, BX and BY Control Suffixes</b>	
17. Coins Ignored When Entered .....	28
18. Control Has No Display .....	29
19. Door Open Indicator .....	31
20. Motor Will Not Start/Run .....	33
21. Unit Will Not Heat – Gas.....	37
22. Unit Will Not Heat – Steam (T30 Models Only).....	40
23. Unit Will Not Heat – Electric (T30 Models Only) .....	43
24. Error Codes .....	46
<b>Gas and Steam Models</b>	
Control Circuit Schematic.....	47
Control Circuit Connection Diagram .....	48
Control Box Schematic .....	49
Control Box Connection Diagram .....	50


Electric Models	
Control Circuit Schematic .....	51
Control Circuit Connection Diagram .....	52
Contactors Box Schematic .....	53
Contactors Box Connection Diagram .....	54
<b>Section 6 – NetMaster Troubleshooting .....</b>	<b>55</b>
<b>Models with NC, NJ, NR, NX, NY, ZC, ZR, ZX and ZY</b>	
<b>Control Suffixes</b>	
25. No Infra-red (IR) Communication .....	55
26. Coins Ignored When Entered .....	56
27. Control Has No Display .....	57
28. Door Open Indicator .....	60
29. Motor Will Not Start/Run .....	64
30. Unit Will Not Heat – Gas .....	70
<b>Section 7 – Hybrid Timer Control Troubleshooting .....</b>	<b>74</b>
<b>Models with QT, SD and SX Control Suffixes</b>	
31. Coins Ignored When Entered .....	74
32. Control Has No Display – OPL Models .....	75
33. Display Flashes “dr” With Door Closed – OPL Models .....	78
34. Vend Satisfied, No In Use LED – Coin Models .....	81
35. In Use LED Lit, No Motor Run – Coin Models .....	85
36. Motor Will Not Start/Run – Coin Models .....	88
37. Motor Will Not Start/Run – OPL Models .....	93
38. Unit Will Not Heat – Gas – Coin Models .....	98
39. Unit Will Not Heat – Gas – OPL Models .....	101
40. Unit Will Not Heat – Steam – OPL Models (T30 Models Only) ...	104
41. Unit Will Not Heat – Electric Coin (T30 Models Only) .....	106
42. Unit Will Not Heat – Electric OPL (T30 Models Only) .....	110
43. Error Codes .....	114
<b>Section 8 – Quantum Control Troubleshooting .....</b>	<b>115</b>
<b>Models with LC, LX, LY, WC, WX and WY Control Suffixes</b>	
44. No Infrared Communication .....	116
45. Coins Ignored When Entered .....	117
46. No Display .....	118
47. “Door Open” Indicator .....	120
48. No Start/Run .....	122
49. Unit Will Not Heat – Gas .....	124
50. Unit Will Not Heat – Steam .....	127
51. Unit Will Not Heat – Electric .....	129
52. CE Models No Display .....	132
53. CE Models “Door Open” Indicator .....	134
54. CE Models No Start/Run .....	136
55. CE Models Will Not Heat – Gas/Steam .....	138
56. CE Models Will Not Heat – Electric .....	141


# Section 1

## Safety Information

Throughout this manual and on machine decals, you will find precautionary statements (“CAUTION”, “WARNING”, and “DANGER”) followed by specific instructions. These precautions are intended for the personal safety of the operator, user, servicer, and those maintaining the machine.

	<b>DANGER</b>
<p>Danger indicates an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.</p>	

	<b>WARNING</b>
<p>Warning indicates a hazardous situation that, if not avoided, could cause severe personal injury or death.</p>	


	<b>CAUTION</b>
<p>Caution indicates a hazardous situation that, if not avoided, may cause minor or moderate personal injury or property damage.</p>	

Additional precautionary statements (“IMPORTANT” and “NOTE”) are followed by specific instructions.

**IMPORTANT:** The word “IMPORTANT” is used to inform the reader of specific procedures where minor machine damage will occur if the procedure is not followed.

**NOTE:** The word “NOTE” is used to communicate installation, operation, maintenance or servicing information that is important but not hazard related.


In the interest of safety, some general precautions relating to the operation of this machine follow.


	<b>WARNING</b>
<ul style="list-style-type: none"><li>• Failure to install, maintain, and/or operate this product according to the manufacturer’s instructions may result in conditions which can produce serious injury, death and/or property damage.</li><li>• Do not repair or replace any part of the product or attempt any servicing unless specifically recommended or published in this Service Manual and that you understand and have the skills to carry out.</li><li>• Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the product is properly grounded and to reduce the risk of fire, electric shock, serious injury, or death.</li></ul>	
<p>W006R1</p>	


**IMPORTANT INFORMATION:** During the lifetime of a tumbler, it may require service. The information contained in this manual was written and is intended for use by qualified service technicians who are familiar with the safety procedures required in the repair of a tumbler, and who are equipped with the proper tools and testing equipment.

**NOTE:** The WARNING and IMPORTANT instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. It must be understood that common sense, caution and carefulness are factors which **CANNOT** be built into this tumbler. These factors **MUST BE** supplied by the person(s) installing, maintaining or operating the tumbler.

Always contact your dealer, distributor, service agent or the manufacturer on any problems or conditions you do not understand.

	<b>WARNING</b>
<p>To reduce the risk of electric shock, fire, explosion, serious injury or death:</p> <ul style="list-style-type: none"><li>• Disconnect electric power to the tumbler before servicing.</li><li>• Never start the tumbler with any guards/panels removed.</li><li>• Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.</li></ul> <p style="text-align: right;">W240</p>	

	<b>WARNING</b>
<p>Repairs that are made to your products by unqualified persons can result in hazards due to improper assembly or adjustments subjecting you, or the inexperienced person making such repairs, to the risk of serious injury, electrical shock, or death.</p> <p style="text-align: right;">W007</p>	

	<b>CAUTION</b>
<p>If you or an unqualified person perform service on your product, you must assume the responsibility for any personal injury or property damage which may result. The manufacturer will not be responsible for any injury or property damage arising from improper service and/or service procedures.</p> <p style="text-align: right;">W008</p>	

## Locating an Authorized Service Person

Alliance Laundry Systems is not responsible for personal injury or property damage resulting from improper service. Review all service information before beginning repairs.

Warranty service must be performed by an authorized technician, using authorized factory parts. If service is required after the warranty expires, Alliance Laundry Systems also recommends contacting an authorized technician and using authorized factory parts.

## Safety Warnings and Decals

SAFETY WARNINGS and decals have been provided in key locations to remind you of important precautions for the safe operation and maintenance of your tumbler. Please take the time to review these warnings before proceeding with service work.

All decals have been designed and applied to withstand washing and cleaning. Decals should be checked periodically to be sure they have not been damaged, removed, or painted.

## Safety Precautions for Servicing Tumblers

### Prior to servicing tumbler:

- Disconnect electrical service and “lockout” to prevent unintentional connection.
- Shut off supply gas valve.
- Allow machine to cool prior to servicing.

### After servicing tumbler:

- Control/access panels must be reinstalled.
- Motor/drive/belt guards must be reinstalled.
- Contactor/junction/accessory box covers must be reinstalled.
- Use a non-corrosive leak detection solution to check all pipe connections for gas leaks. **DO NOT USE AN OPEN FLAME TO CHECK FOR GAS LEAKS!**
- The loading door switch, lint door switch and airflow switch must be operating properly.

# Section 2

## Introduction

### Model Identification

Information in this manual is applicable to these models.

	Gas			Steam	Electric
<b>T30</b>	CHD30STG2-CAT30L	HTT30D	PAT30L	CHD30STS2-CTT30S	CHD30STE2-CTT30E
	CHD30STG2-CAT30N	HTT30L	PAT30N	CHD30STS2-CUT30S	CHD30STE2-CUT30E
	CHD30STG2-CTT30L	HTT30N	PTT30L	DRST30S2-BTT30S	DRST30E2-BTT30E
	CHD30STG2-CTT30N	HUT30L	PTT30N	DRST30S2-BUT30S	DRST30E2-BUT30E
	CHD30STG2-CUT30L	HUT30N	PUT30L	GTT30S	GTT30E
	CHD30STG2-CUT30N	IPD30STG2-ITT30L	PUT30N	GUT30S	GUT30E
	DRST30G2-BAT30L	IPD30STG2-ITT30N	SAT30L	HTT30S	HTT30E
	DRST30G2-BAT30N	KAT30L	SAT30N	HUT30S	HUT30E
	DRST30G2-BTT30D	KAT30N	STT30D	IPD30STS2-ITT30S	IPD30STE2-ITT30E
	DRST30G2-BTT30L	KTT30L	STT30L	KTT30S	KTT30E
	DRST30G2-BTT30N	KTT30N	STT30N	KUT30S	KUT30E
	DRST30G2-BUT30L	KUT30L	SUT30L	LTT30S	LTT30E
	DRST30G2-BUT30N	KUT30N	SUT30N	LUT30S	LUT30E
	GAT30L	LAT30L	UAT30L	PTT30S	PTT30E
	GAT30N	LAT30N	UAT30N	PUT30S	PUT30E
	GTT30L	LTT30L	UTT30L	STT30S	STT30E
	GTT30N	LTT30N	UTT30N	SUT30S	SUT30E
	GUT30L	LUT30L	UUT30L	UTT30S	UTT30E
	GUT30N	LUT30N	UUT30N	UUT30S	UUT30E
	HAT30L	MTT30N			
	HAT30N	NTT30N			
<b>T45</b>	CTT45L	HTT45D	SAT45L	Not Applicable	Not Applicable
	CTT45N	HTT45L	SAT45N		
	DRST45G2-BAT45L	HTT45N	STT45D		
	DRST45G2-BAT45N	HUT45L	STT45L		
	DRST45G2-BTT45D	HUT45N	STT45N		
	DRST45G2-BTT45L	IPD45STG2-ITT45L	SUT45L		
	DRST45G2-BTT45N	IPD45STG2-ITT45N	SUT45N		
	GTT45L	KTT45L	UTT45L		
	GTT45N	KTT45N	UTT45N		
	HAT45L	MTT45N			
	HAT45N	NTT45N			

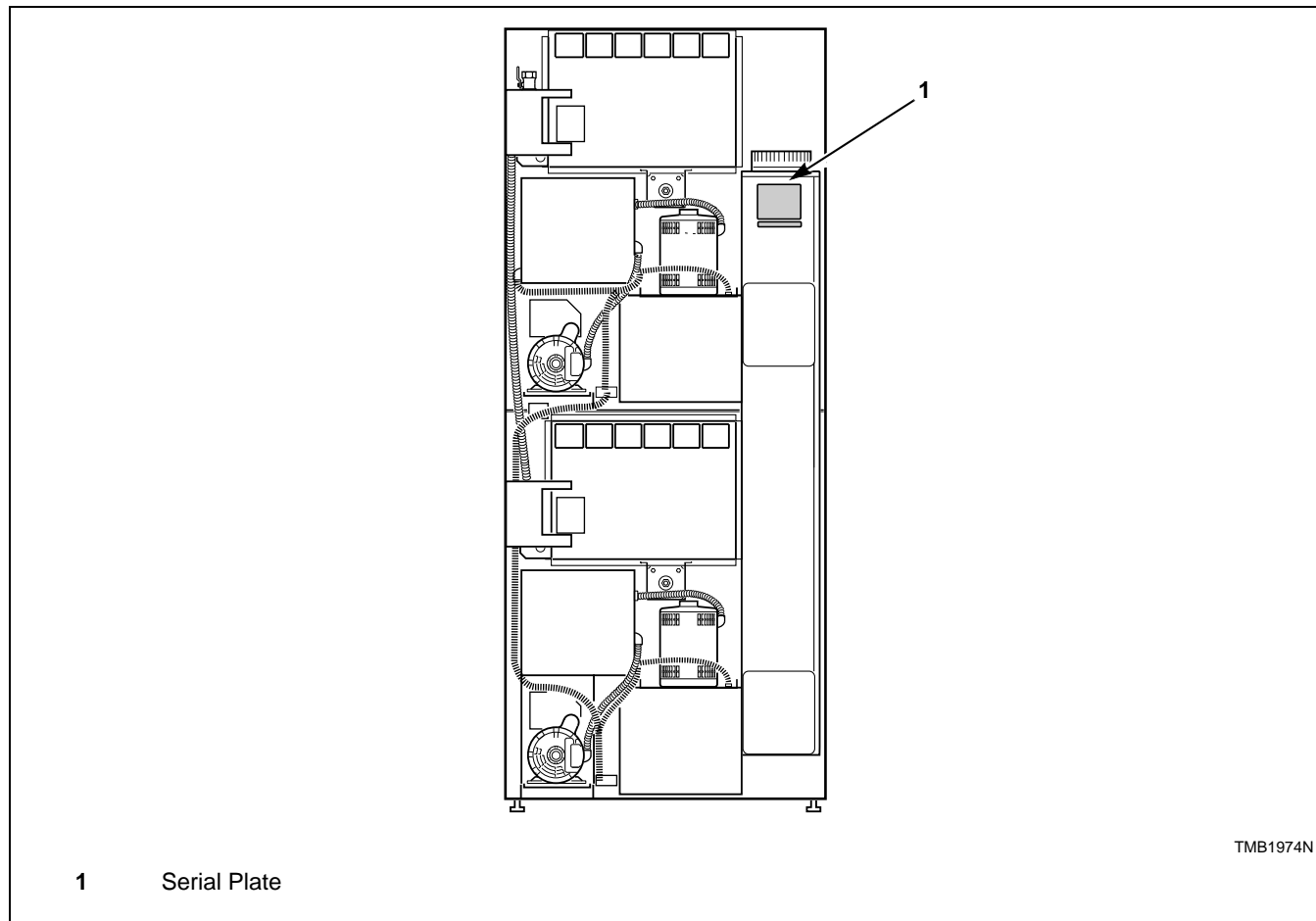
Includes models with the following control suffixes:

3O – DX4 OPL	DX – DMP prep for coin	SD – single drop
3V – DX4 vended	LC – network adaptable coin	SX – single drop, prep for coin
3X – DX4 prep for coin	LX – network adaptable, prep for coin	WC – network ready coin
BC – basic electronic, coin	LY – network adaptable, prep for card	WX – network ready, prep for coin
BG – basic electronic, OPL mode	NC – NetMaster coin	WY – network ready, prep for card
BL – basic electronic, central pay	NJ – micro, prep single card reader	ZC – NetMaster network coin
BX – basic electronic, prep for coin	NR – NetMaster card	ZR – NetMaster network card
BY – basic electronic, prep for card	NX – NetMaster, prep for coin	ZX – NetMaster network, prep for coin
DO – DMP OPL	NY – NetMaster, prep for card	ZY – NetMaster network, prep for card
DV – DMP vended	QT – dual digital timer	



## Serial Plate Location

When calling or writing for information about your product, be sure to mention model and serial numbers. Model and serial numbers are found on the serial plate on the rear of the machine and inside the upper loading door hinge.



## Customer Service

If literature or replacement parts are required, contact the source from which the machine was purchased or contact Alliance Laundry Systems at (920) 748-3950 for the name and address of the nearest authorized parts distributor.

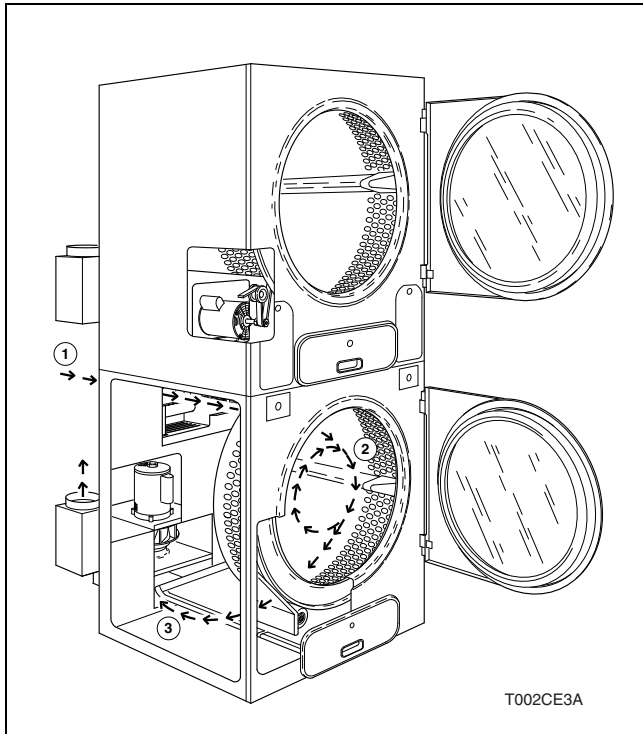
For technical assistance, call (920) 748-3121.

## Wiring Diagram

The wiring diagram is located inside the contactor or junction box.

The wiring diagram part number is located in the lower portion of the electrical data on the serial plate.

## How A Tumbler Works



A tumbler uses heated air to dry loads of laundry.

- ① When the motor is started, the exhaust fan pulls room temperature air in through the air intake at the rear of the tumbler and over the heat source (burner flame for gas, heating element for electric, and coil for steam).
- ② The heated air moves into the cylinder, where it is circulated through the wet load by the tumbling action of the cylinder.
- ③ The air then passes through the lint filter, exhaust fan, and is vented to the outdoors.

# Section 3

## Troubleshooting



### WARNING

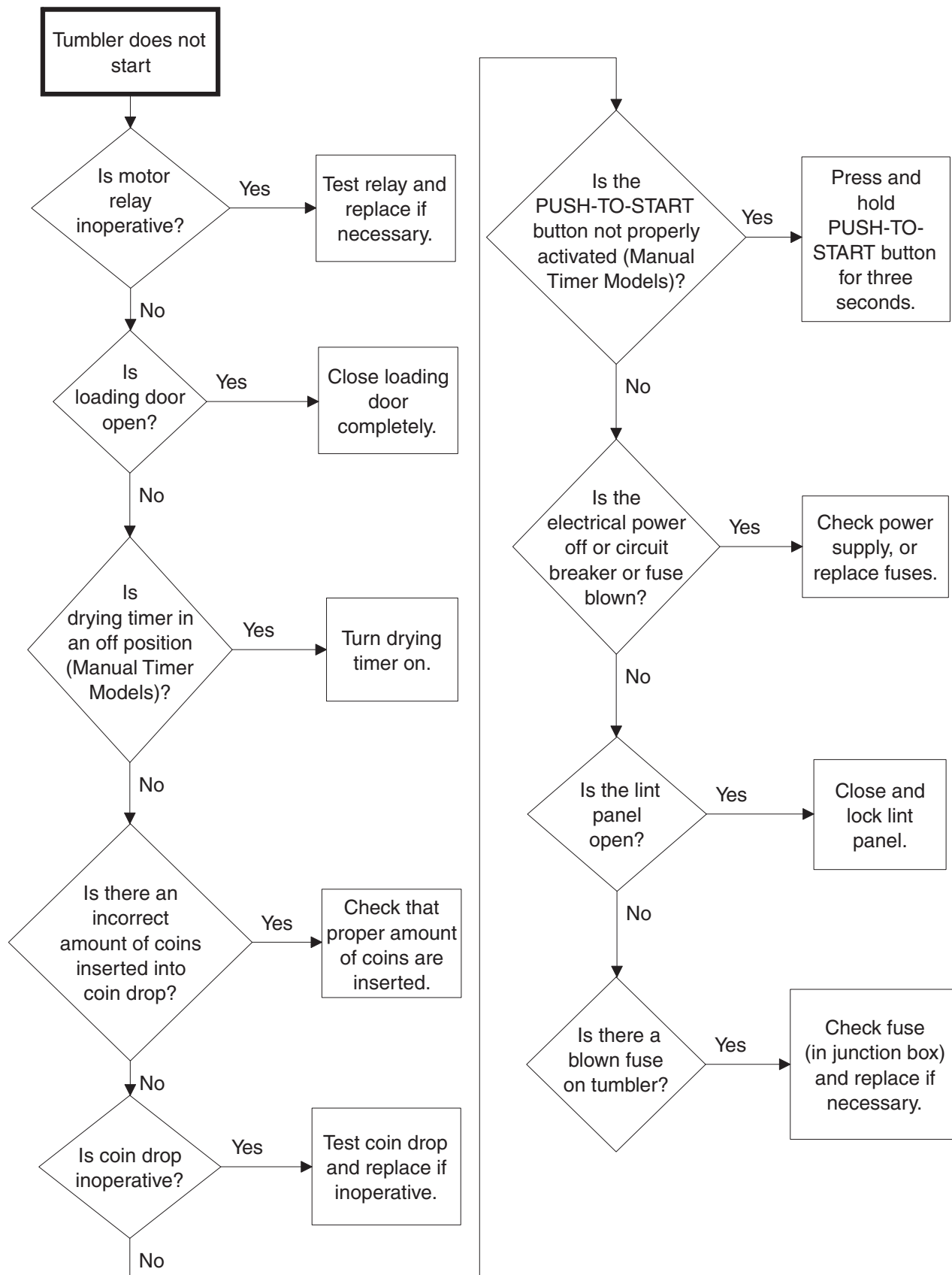
To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

W002

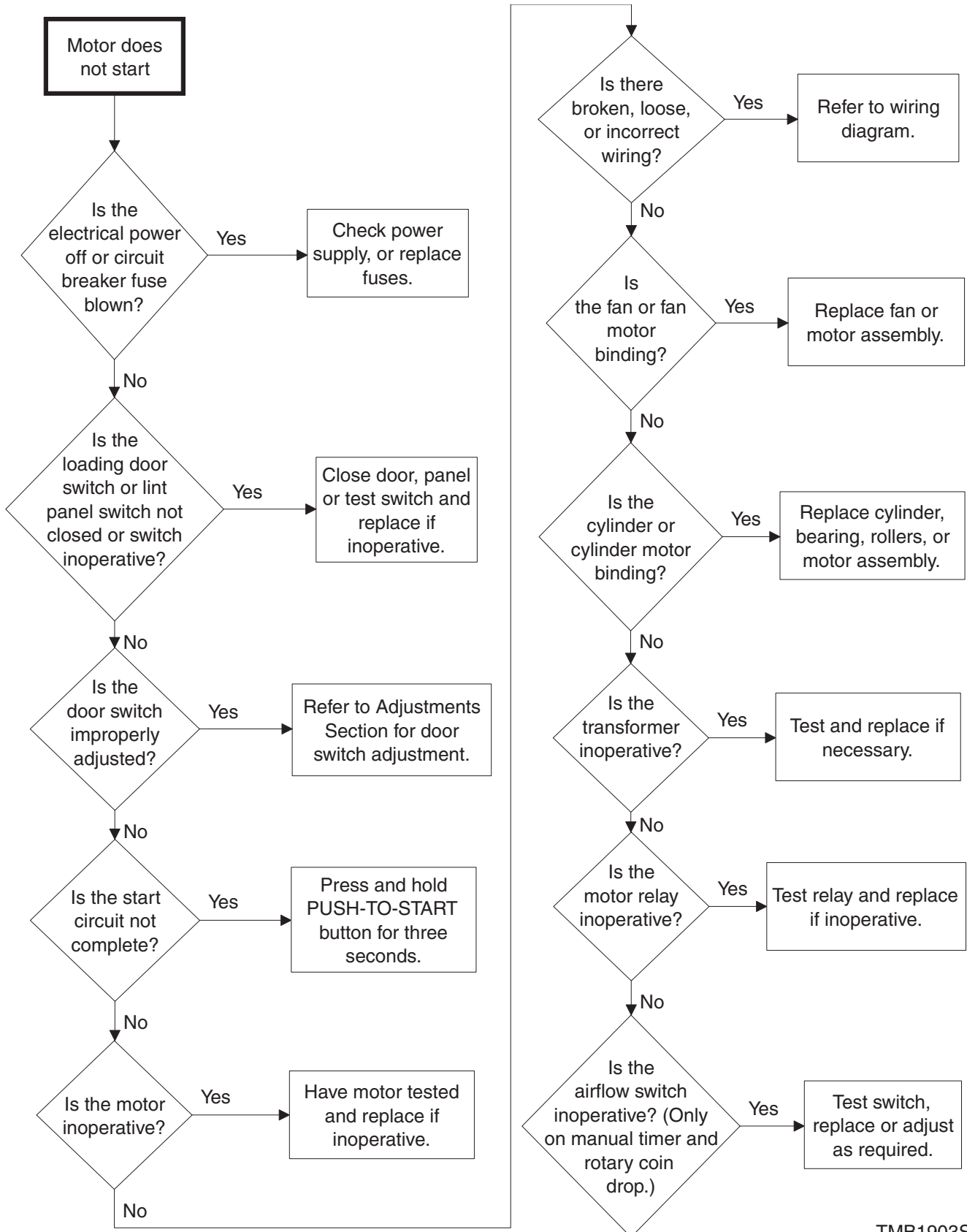
**IMPORTANT:** Refer to wiring diagram for aid in testing tumbler components.

# 1. Tumbler Does Not Start



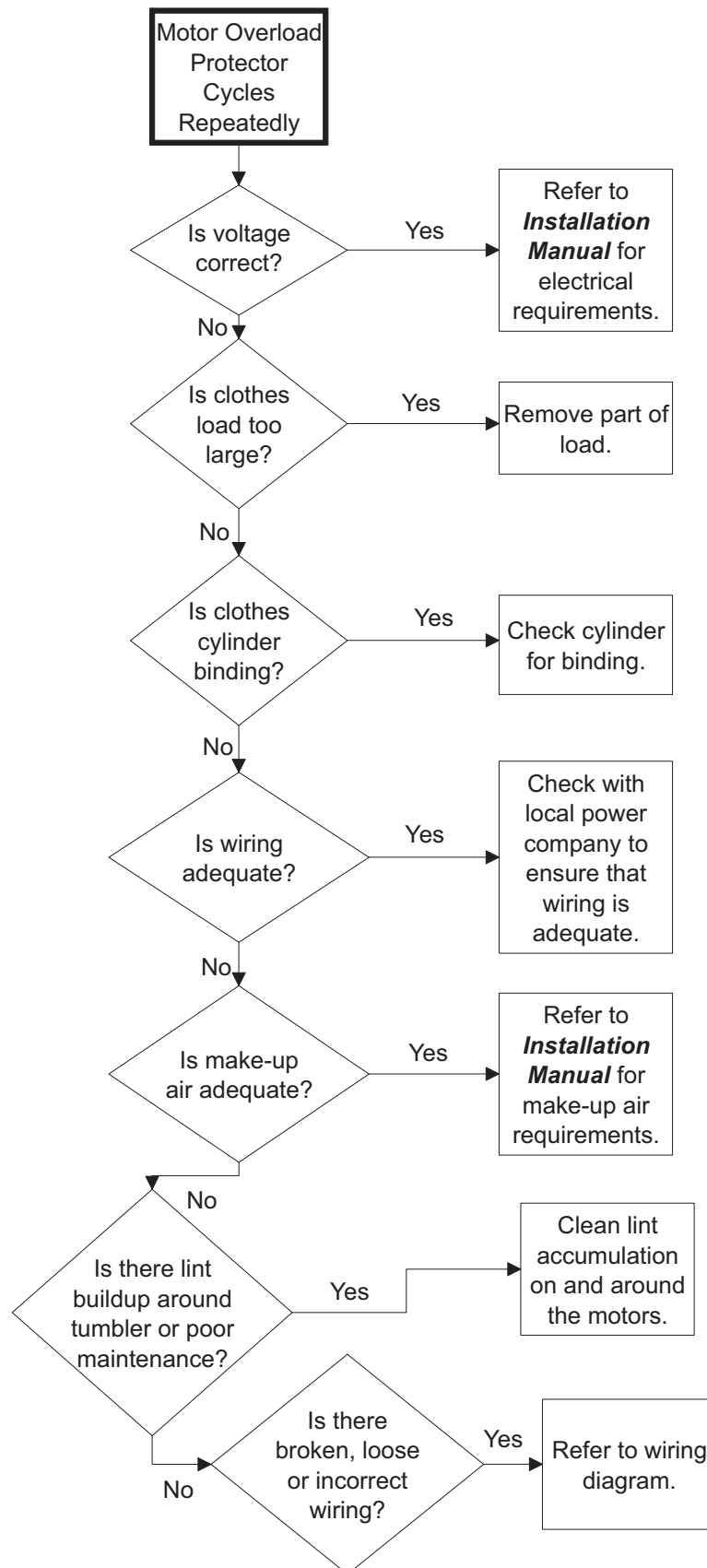
TMB1902S

## 2. Motor Does Not Start



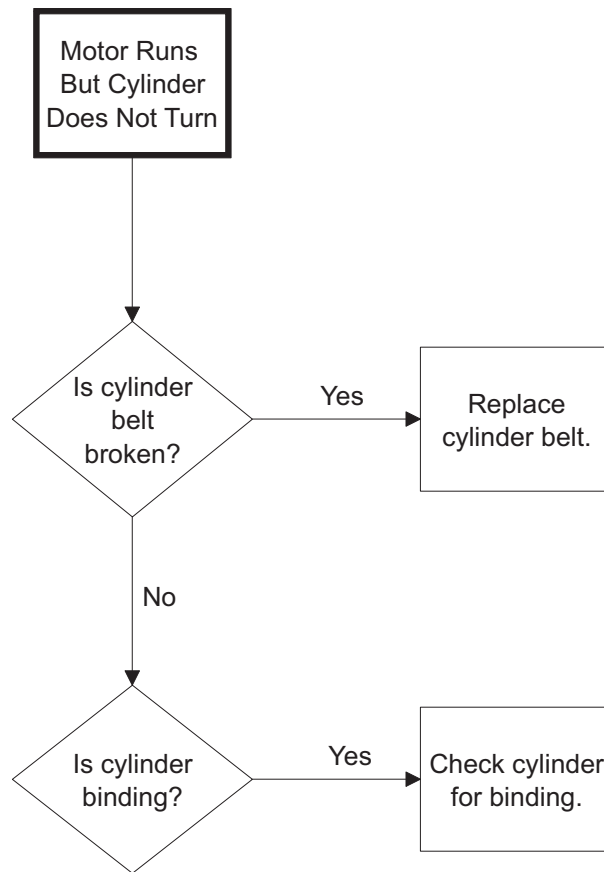
TMB1903S

### 3. Motor Overload Protector Cycles Repeatedly



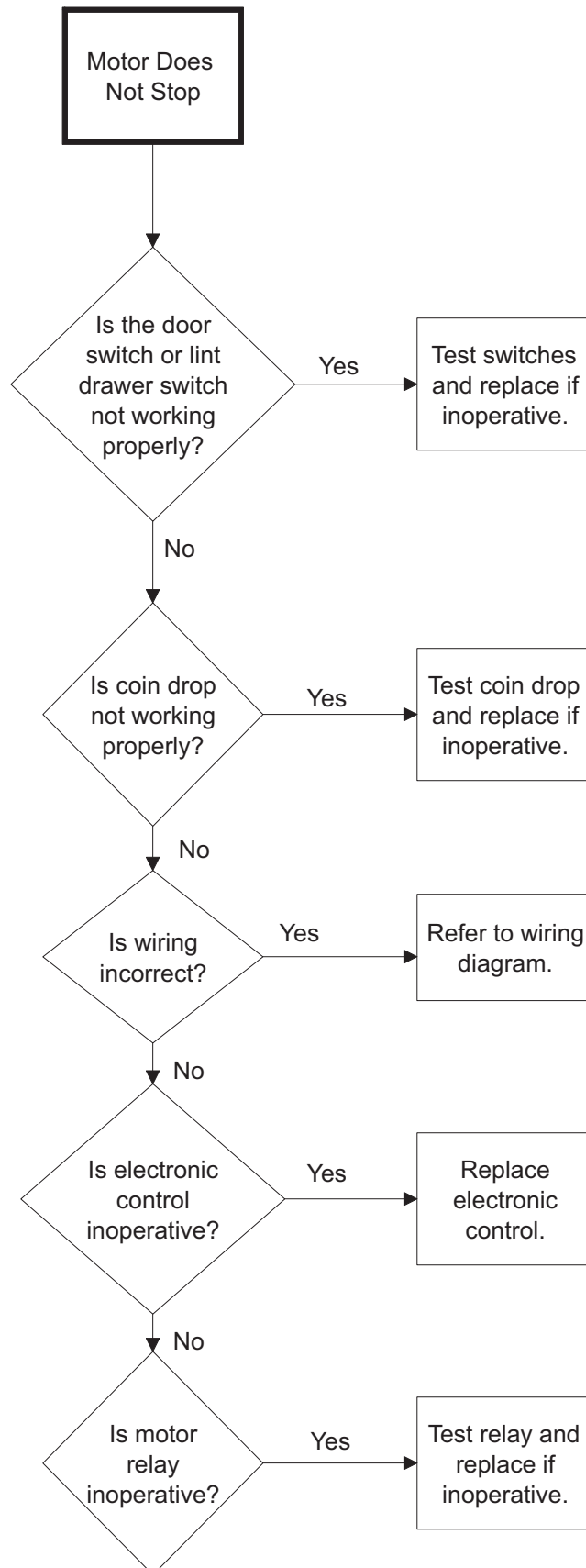
TMB1904S

#### 4. Motor Runs But Cylinder Does Not Turn



TMB1905S

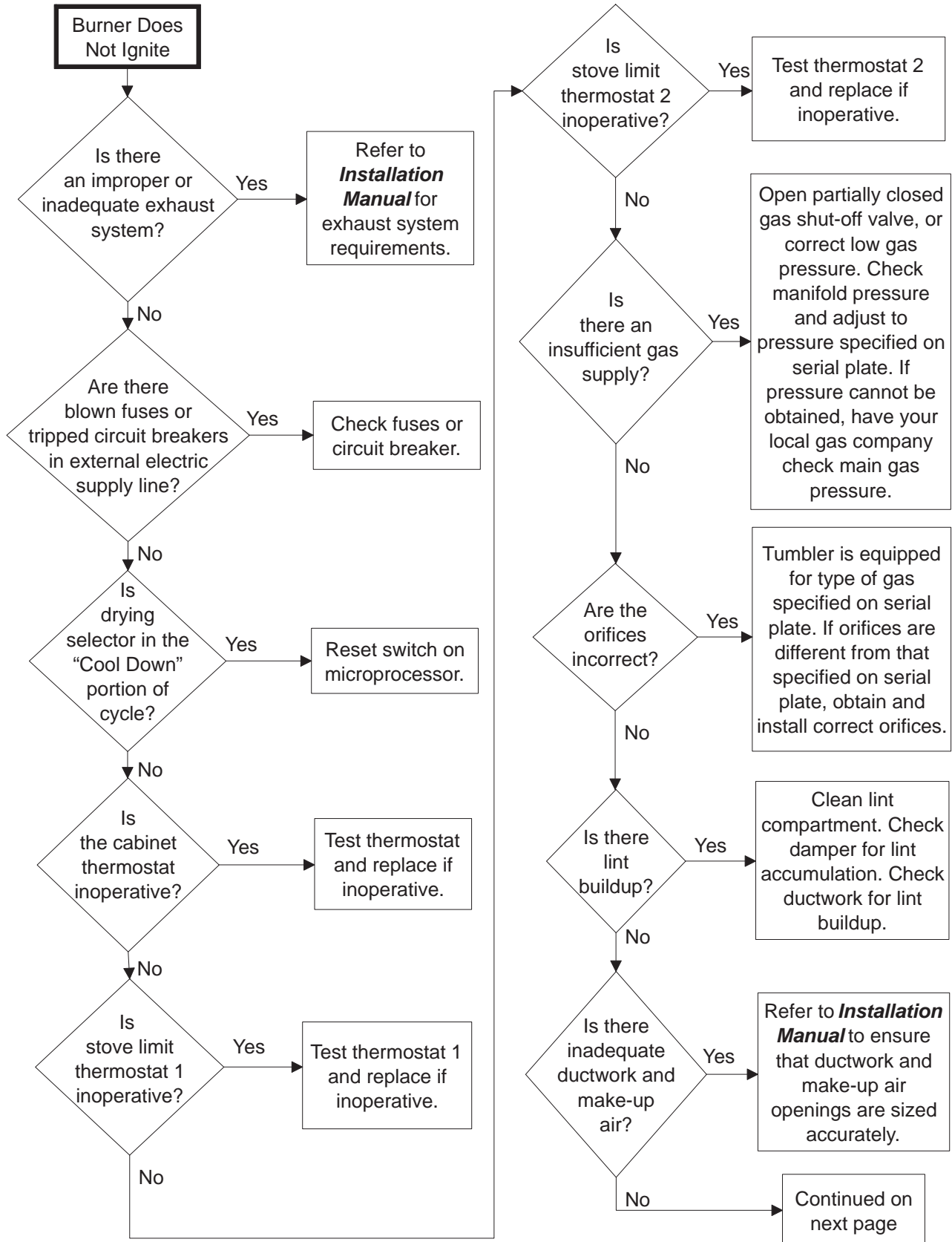
## 5. Motor Does Not Stop



TMB1906S

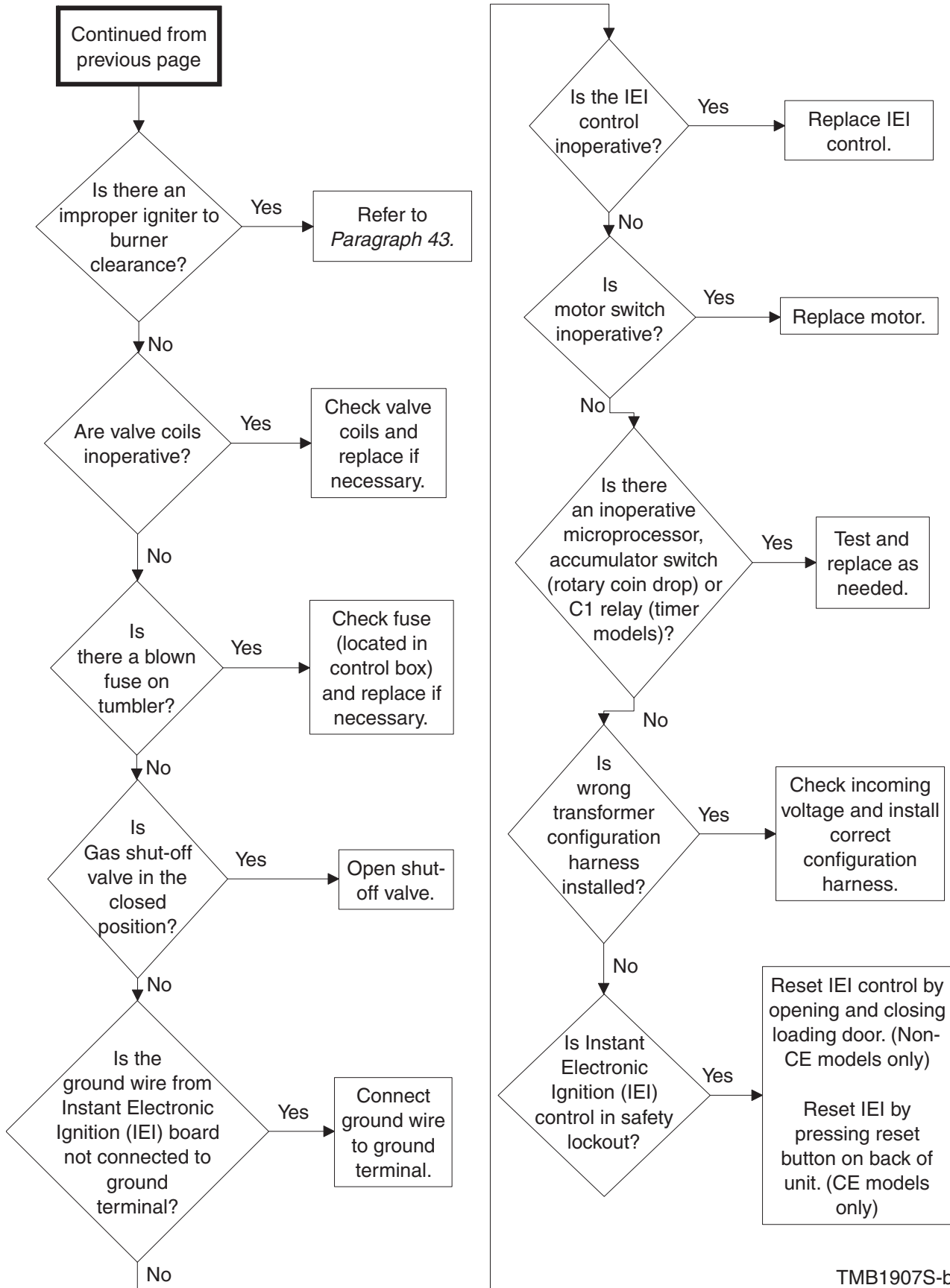


## 6. Burner Does Not Ignite



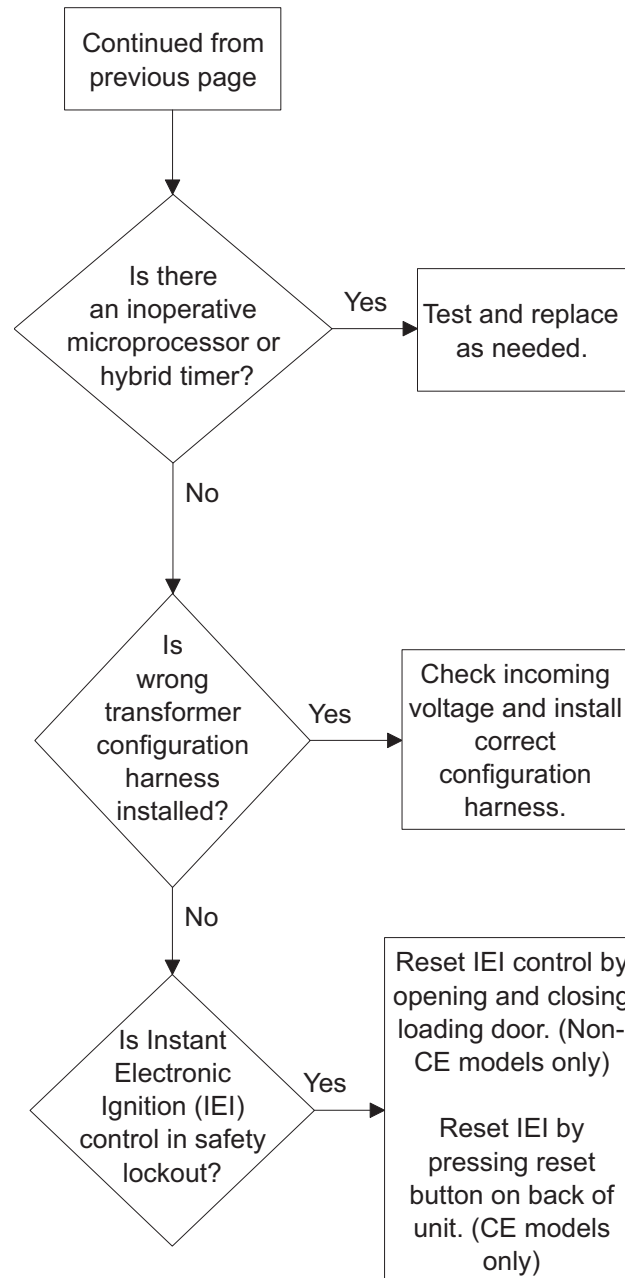
TMB1907S-a

## 6. Burner Does Not Ignite (continued)



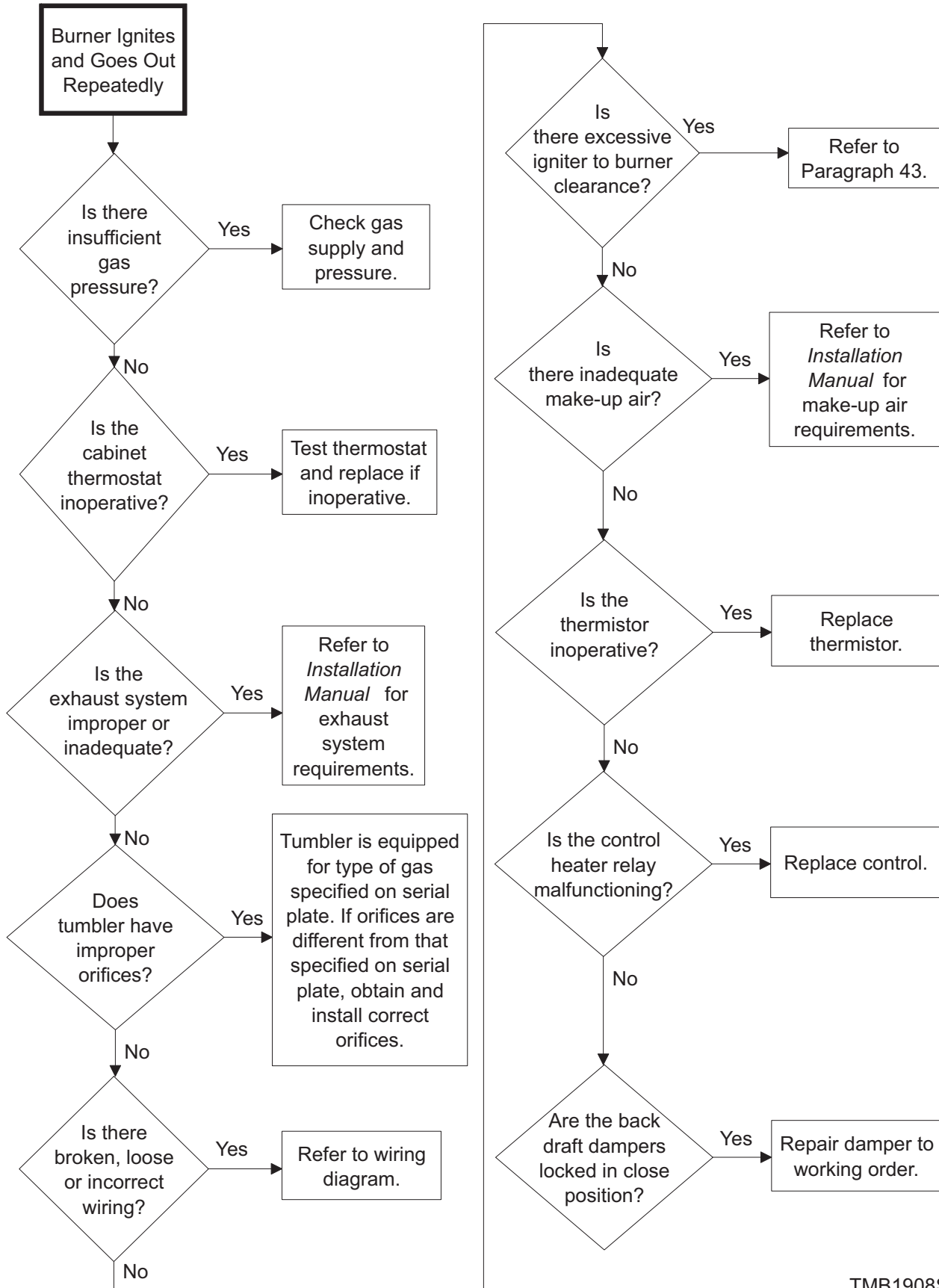
TMB1907S-b

## 6. Burner Does Not Ignite (continued)



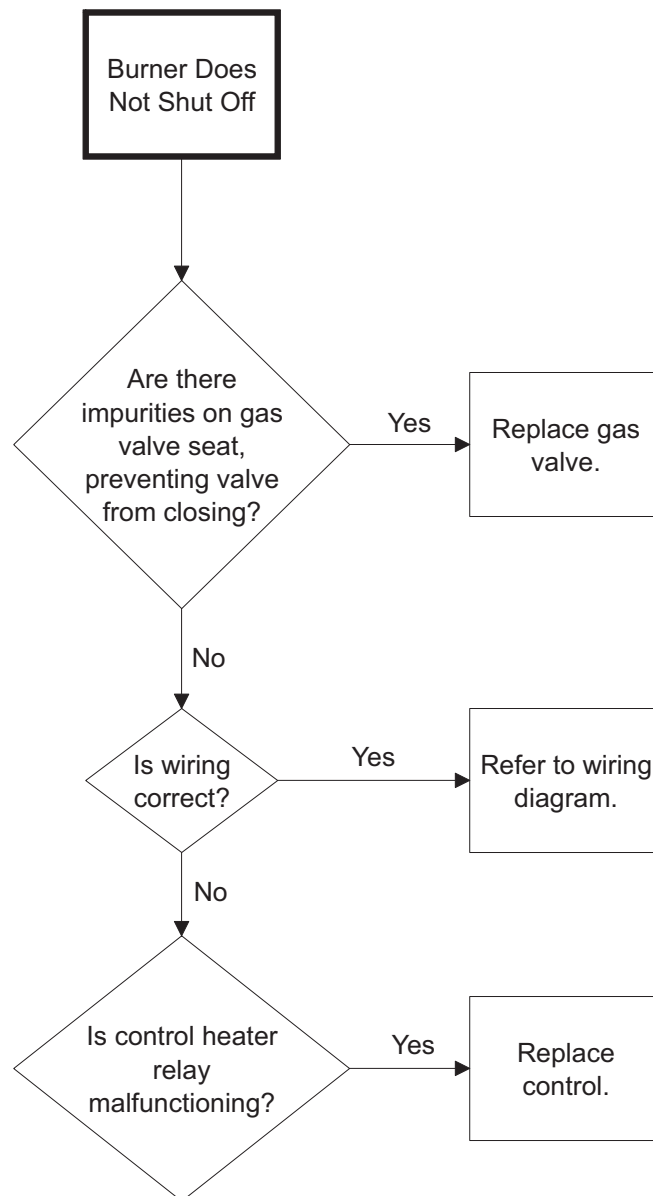
TMB1907S-c

## 7. Burner Ignites and Goes Out Repeatedly



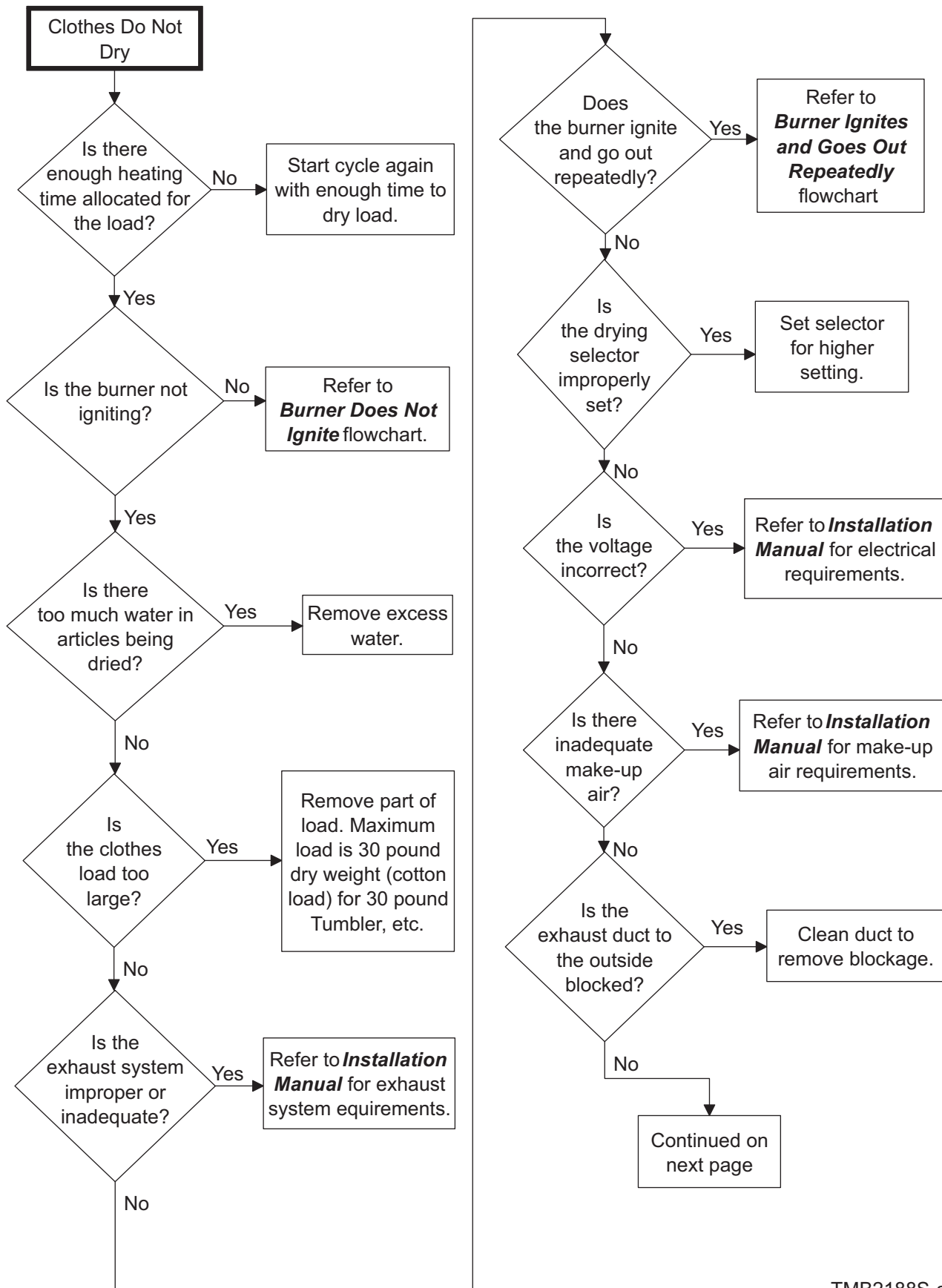
TMB1908S

## 8. Burner Does Not Shut Off



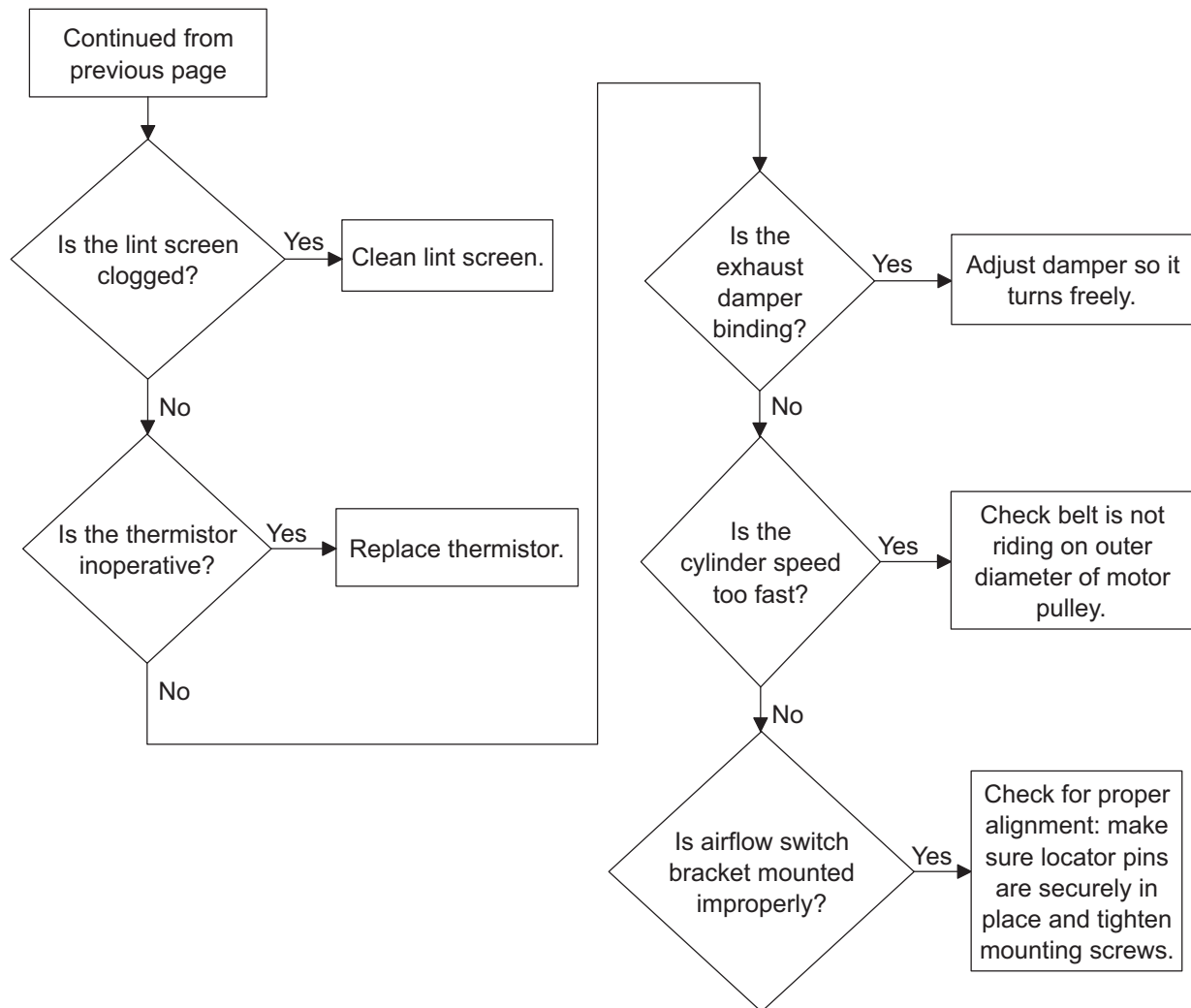
TMB1909S

## 9. Clothes Do Not Dry



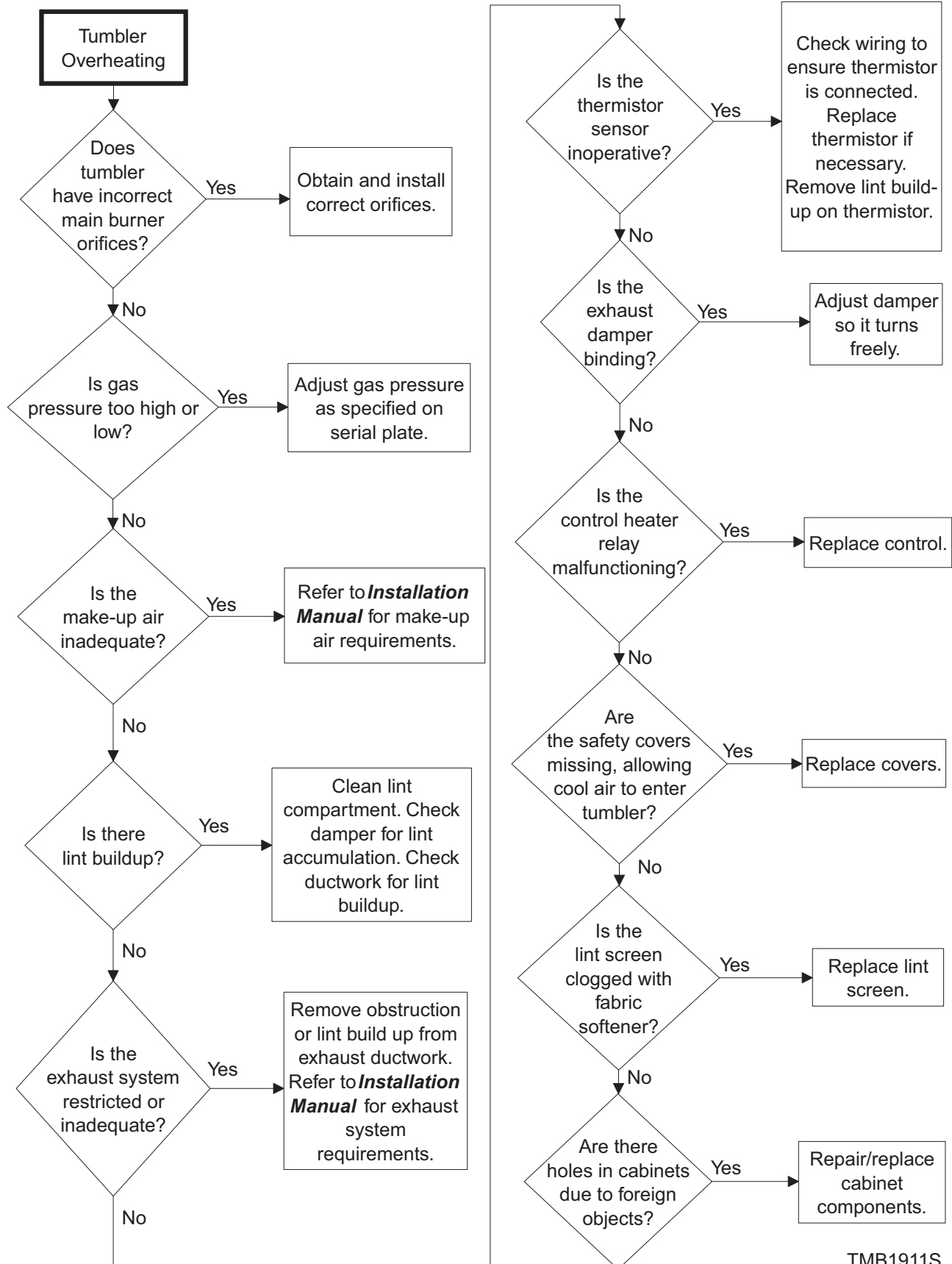
TMB2188S-a

## 9. Clothes Do Not Dry (continued)



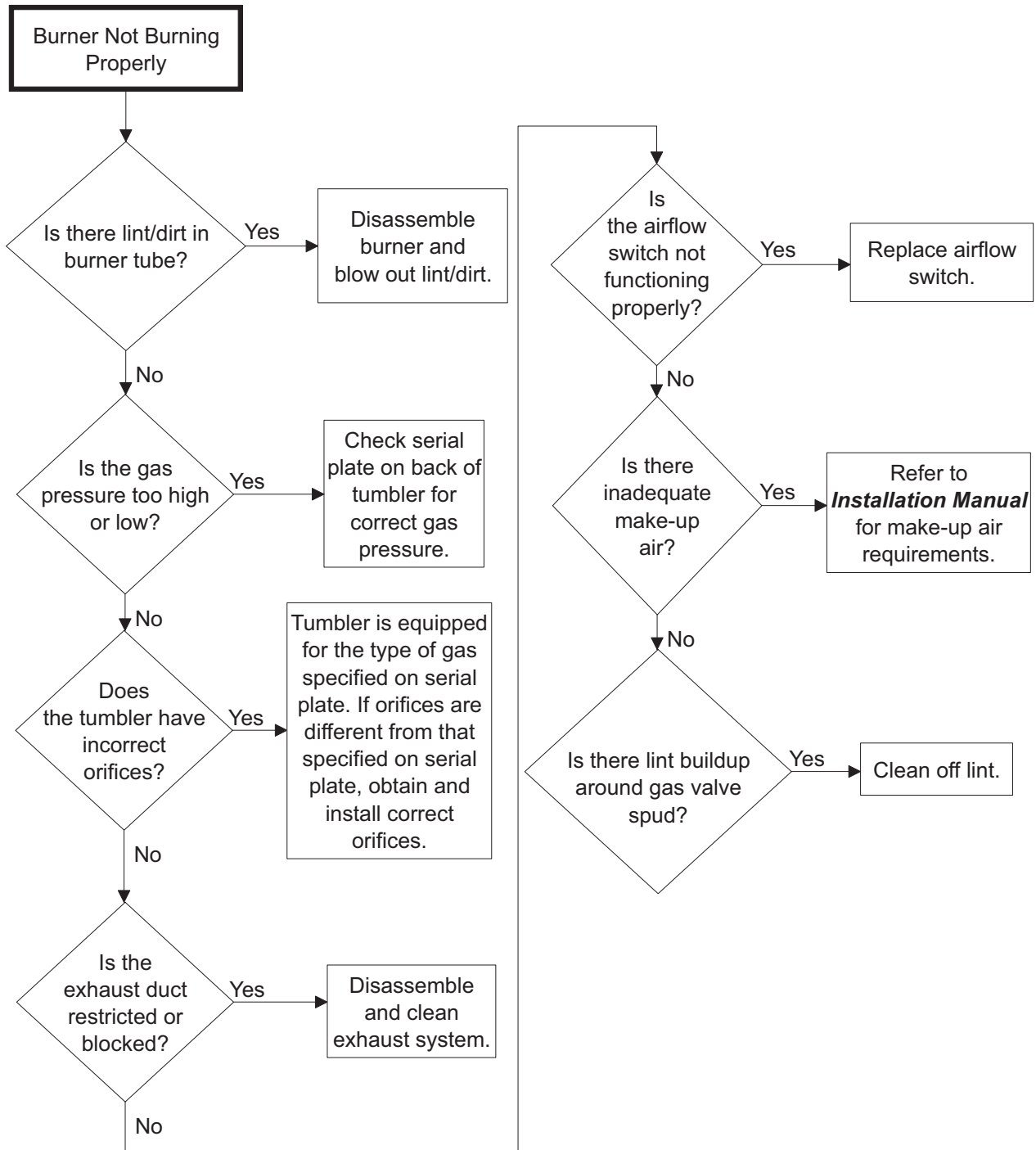
TMB2188S-b

# 10. Tumbler Overheating



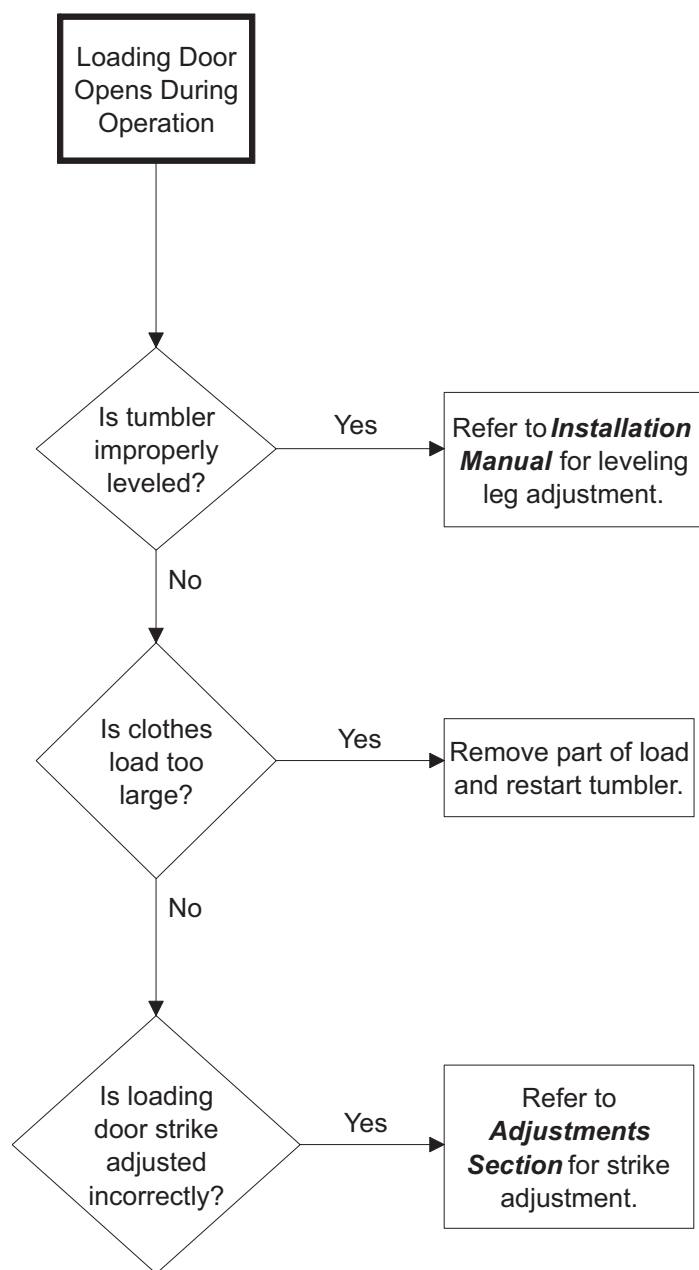


# 11. Burner Not Burning Properly



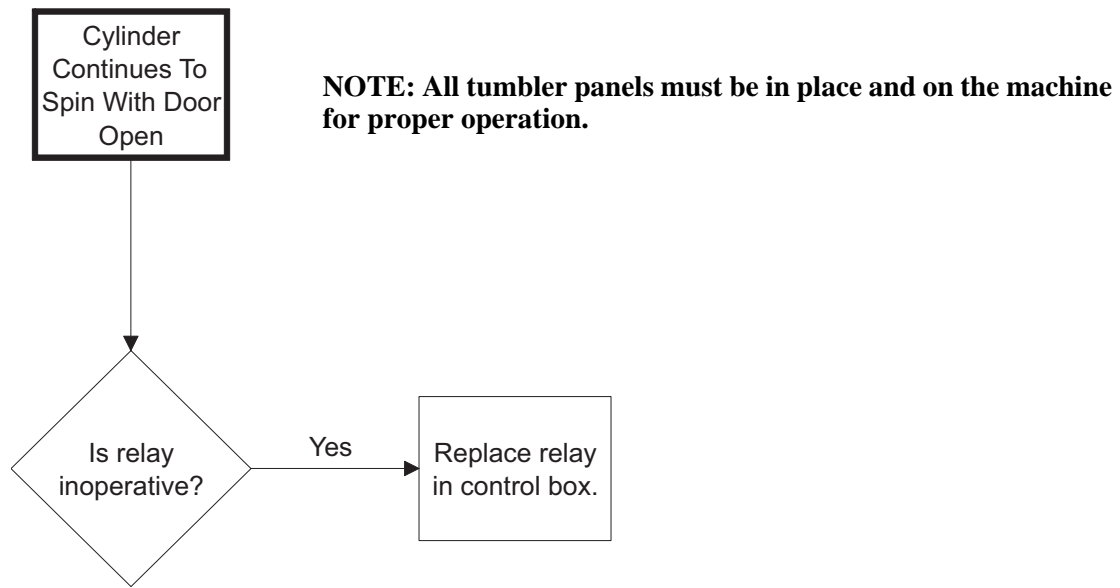
TMB2189S

## 12. Loading Door Opens During Operation



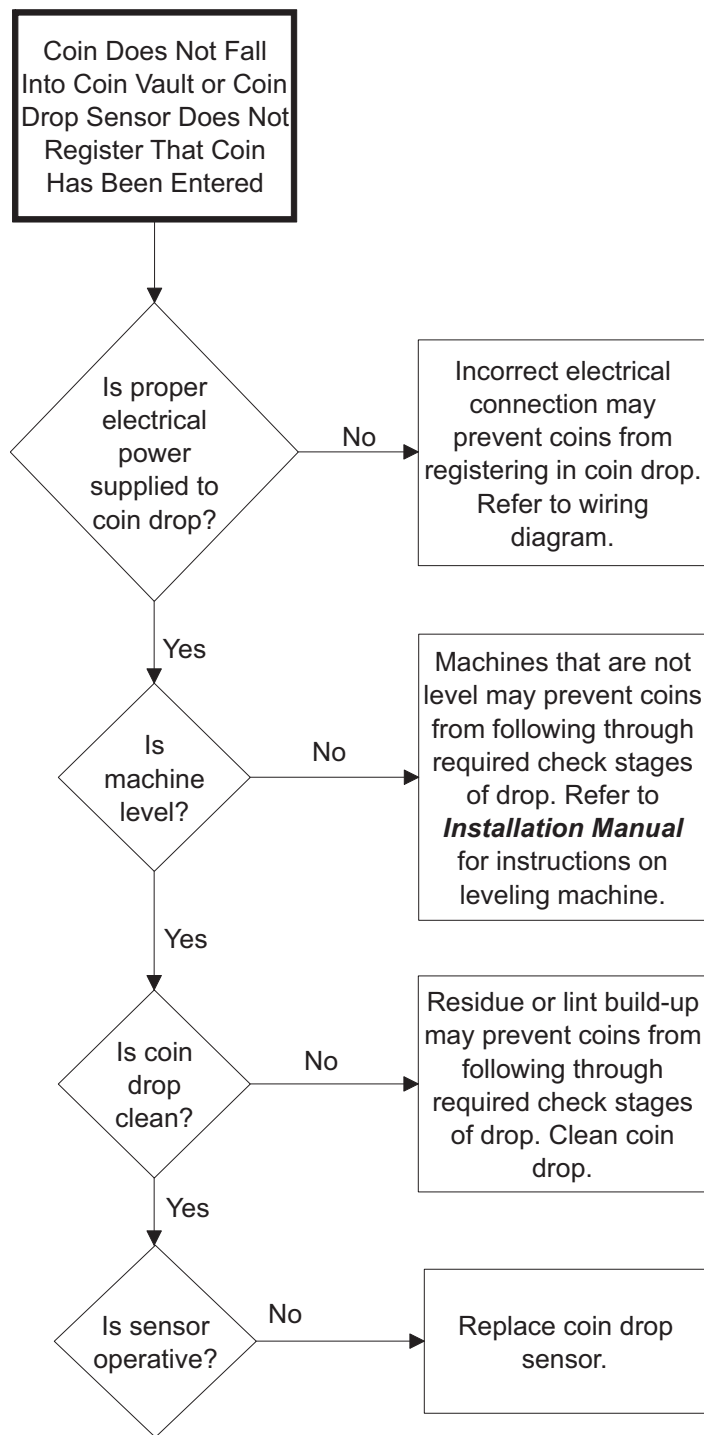
TMB1913S

### 13. Cylinder Continues to Spin with Door Open



TMB1914S

## 14. Coin Does Not Fall into Coin Vault or Coin Drop Sensor Does Not Register That Coin Has Been Entered



TMB1915S

**IMPORTANT:** Never use oil to correct coin drop problem. Oil residue will prevent coins from rolling properly.

**IMPORTANT:** Do not bend or damage mechanical parts within coin drop.

# Section 4

## Adjustments



### WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

W002

### 15. Loading Door Switch

The door switch should be adjusted so the cylinder stops when door is opened 2 inches (51 mm), plus or minus 1/4 inch (6 mm). The switch is normally open and is closed when the door is closed. If adjustment is needed, proceed as follows: Refer to *Figure 1*.

- a. Close door and start tumbler. Slowly open loading door. Cylinder and heat system should shut off when door is open 2 inches (51 mm), plus or minus 1/4 inch (6 mm).
- b. Slowly close loading door. When door is 2 inches or less from being fully closed, the switch actuator on the door should contact the switch plunger and depress it enough to close the switch with an audible “click”.
- c. If switch actuator does not depress the switch plunger enough to operate the switch, bend

switch actuator OUTWARD and repeat steps “a” and “b.”.

### 16. Loading Door Strike

Refer to *Figure 1*.

The door strike must be adjusted so that sufficient tension holds loading door closed against the force of a load tumbling against it. The door is properly adjusted when 8-15 lbs. (3.60-6.75 kg) of pull is required to open door.

If adjustment is needed, follow these steps:

- a. Open loading door.
- b. Loosen jamnut.
- c. Turn door strike screw in or out as required.
- d. Retighten jamnut.

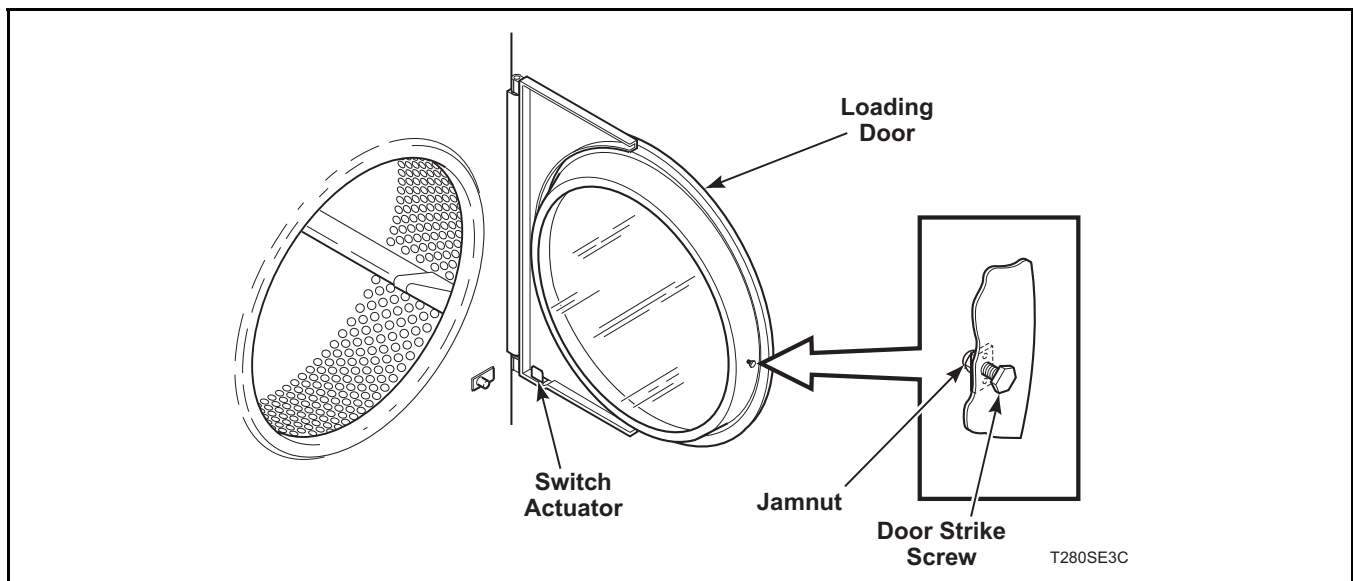


Figure 1

# Section 5

## Micro Display Control (MDC) Troubleshooting

Models with BC, BG, BL, BX and BY Control Suffixes



### WARNING

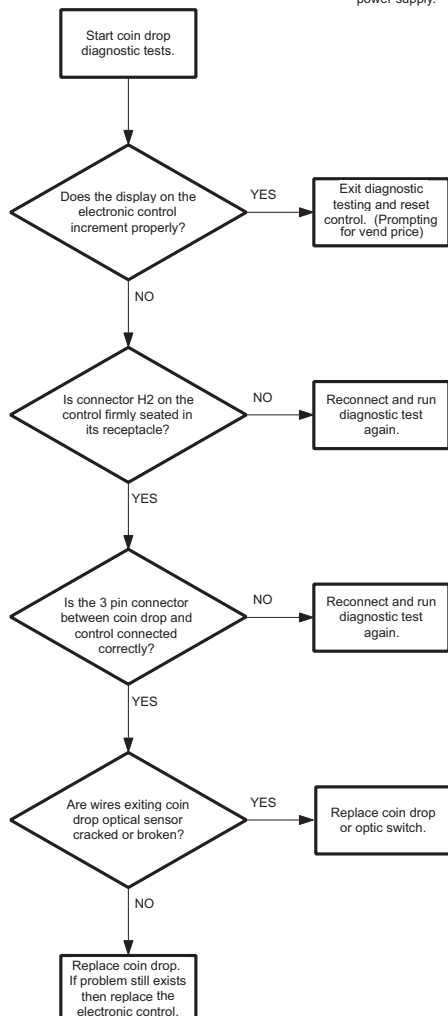
To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

W002

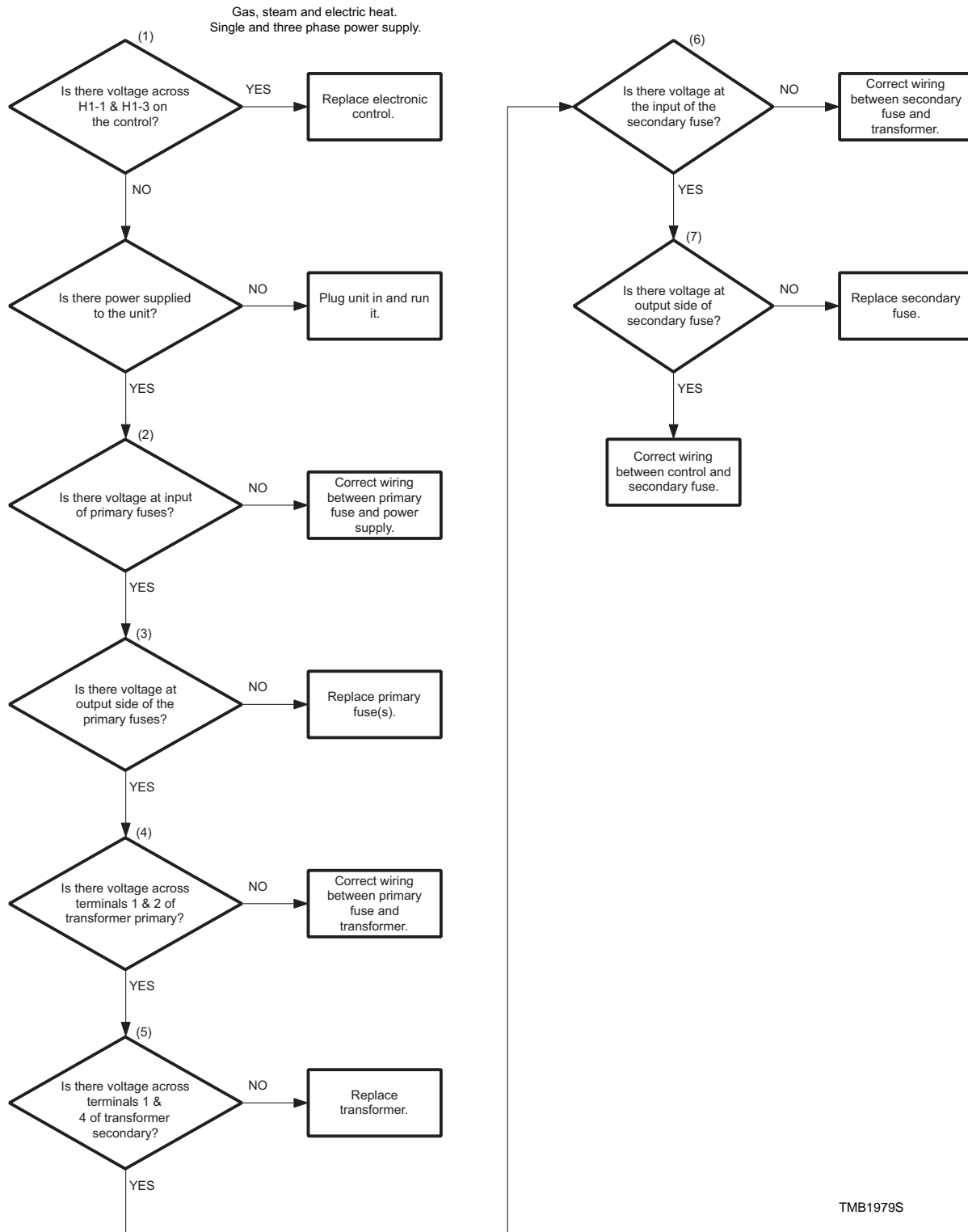
## 17. Coins Ignored When Entered

Gas and electric heat.  
Single and three phase  
power supply.



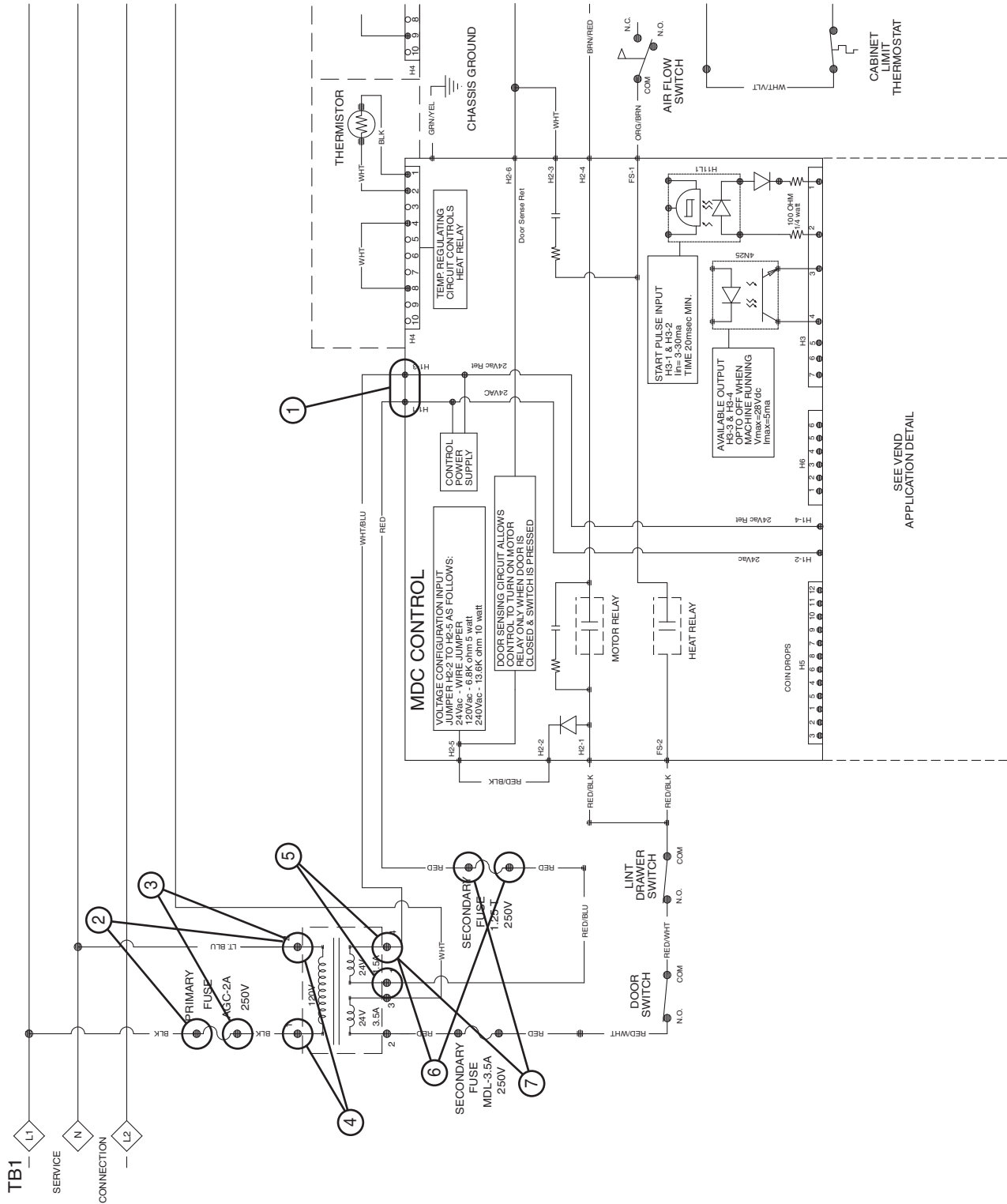
TMB1978S

## 18. Control Has No Display



TMB1979S

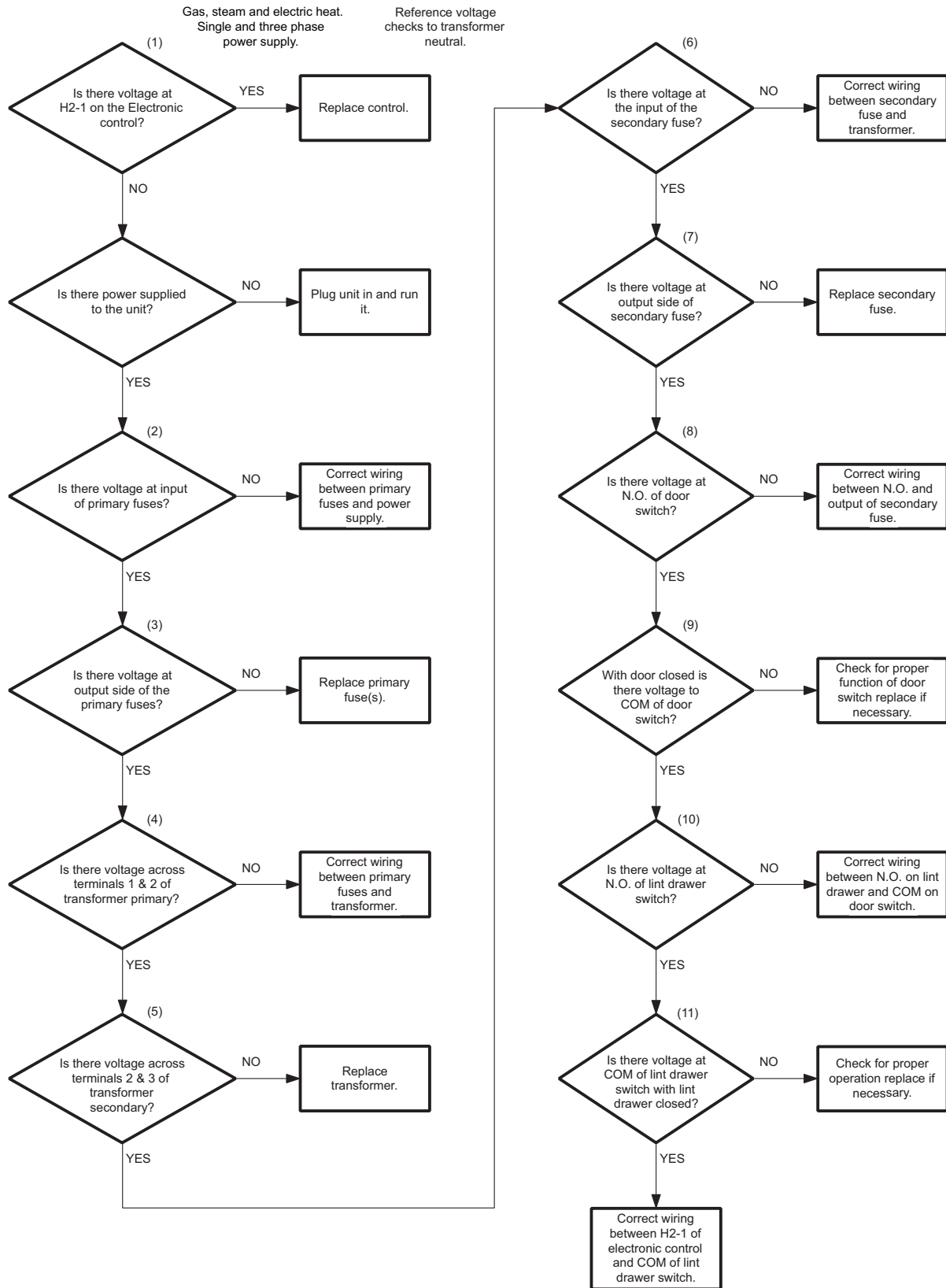
# Control Has No Display



TMB1977S

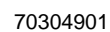


# 19. Door Open Indicator



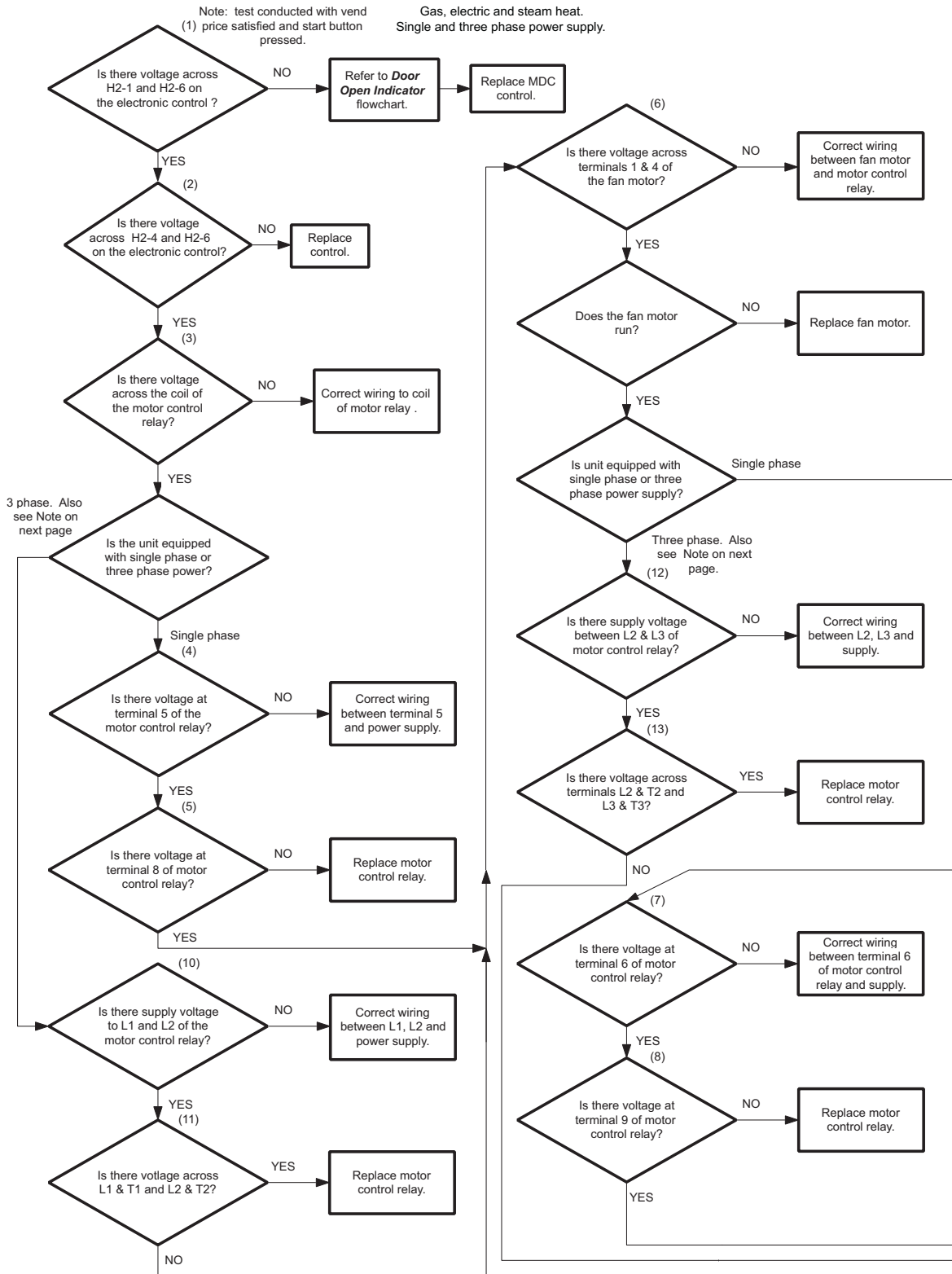
TMB1980S

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

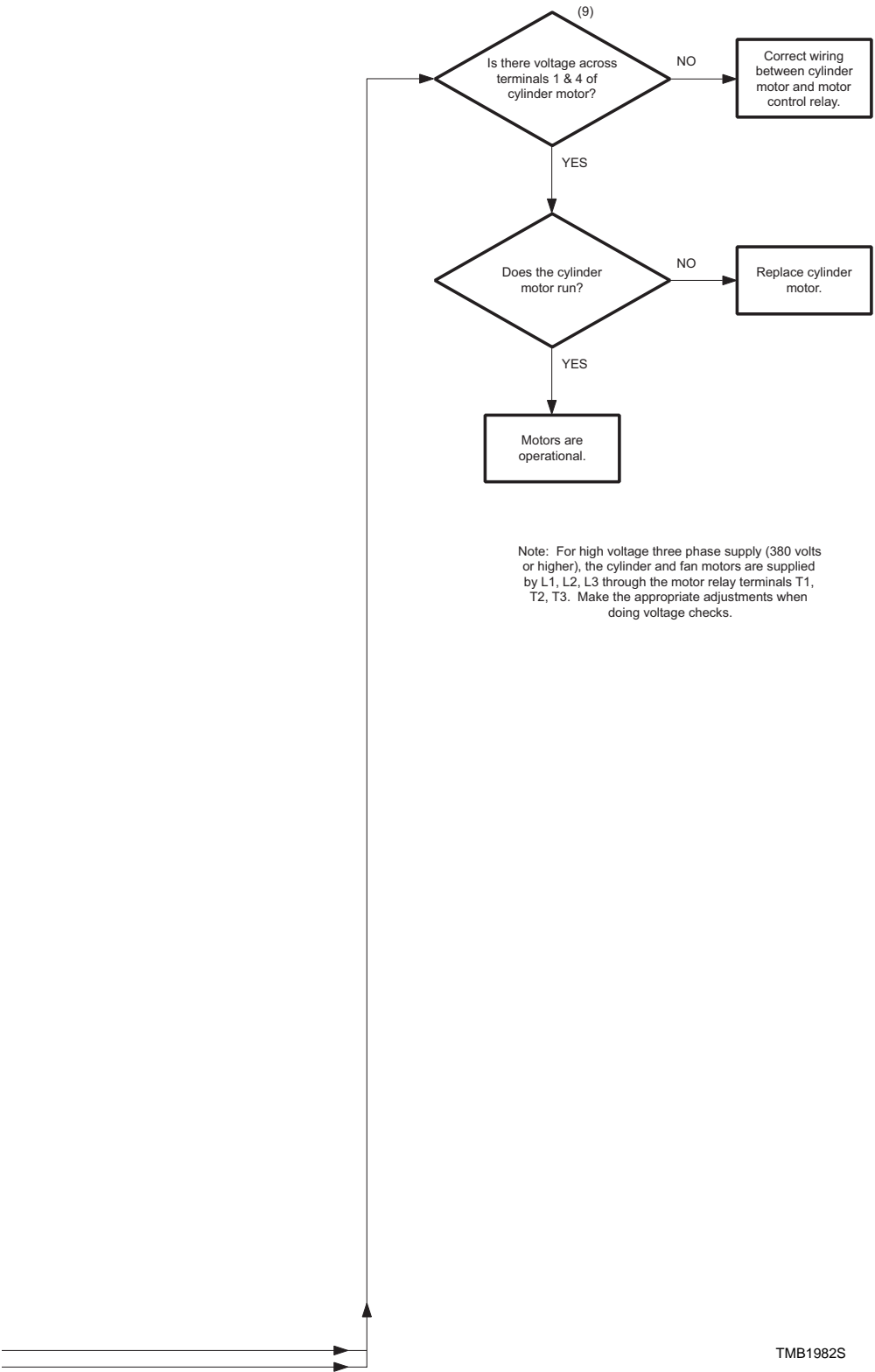


SEE VEND  
APPLICATION DETAIL

## 20. Motor Will Not Start/Run

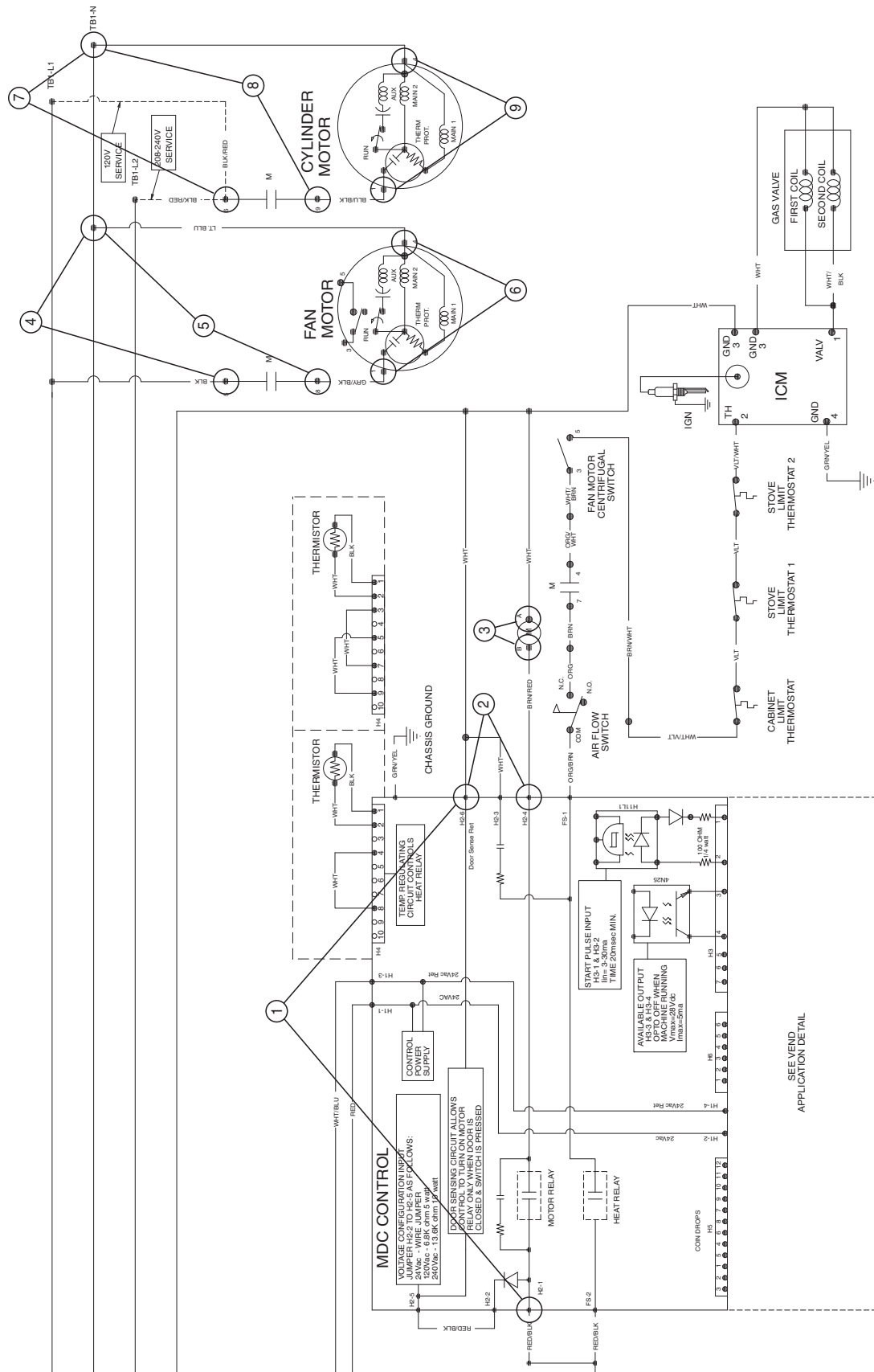


20. Motor Will Not Start/Run (continued)

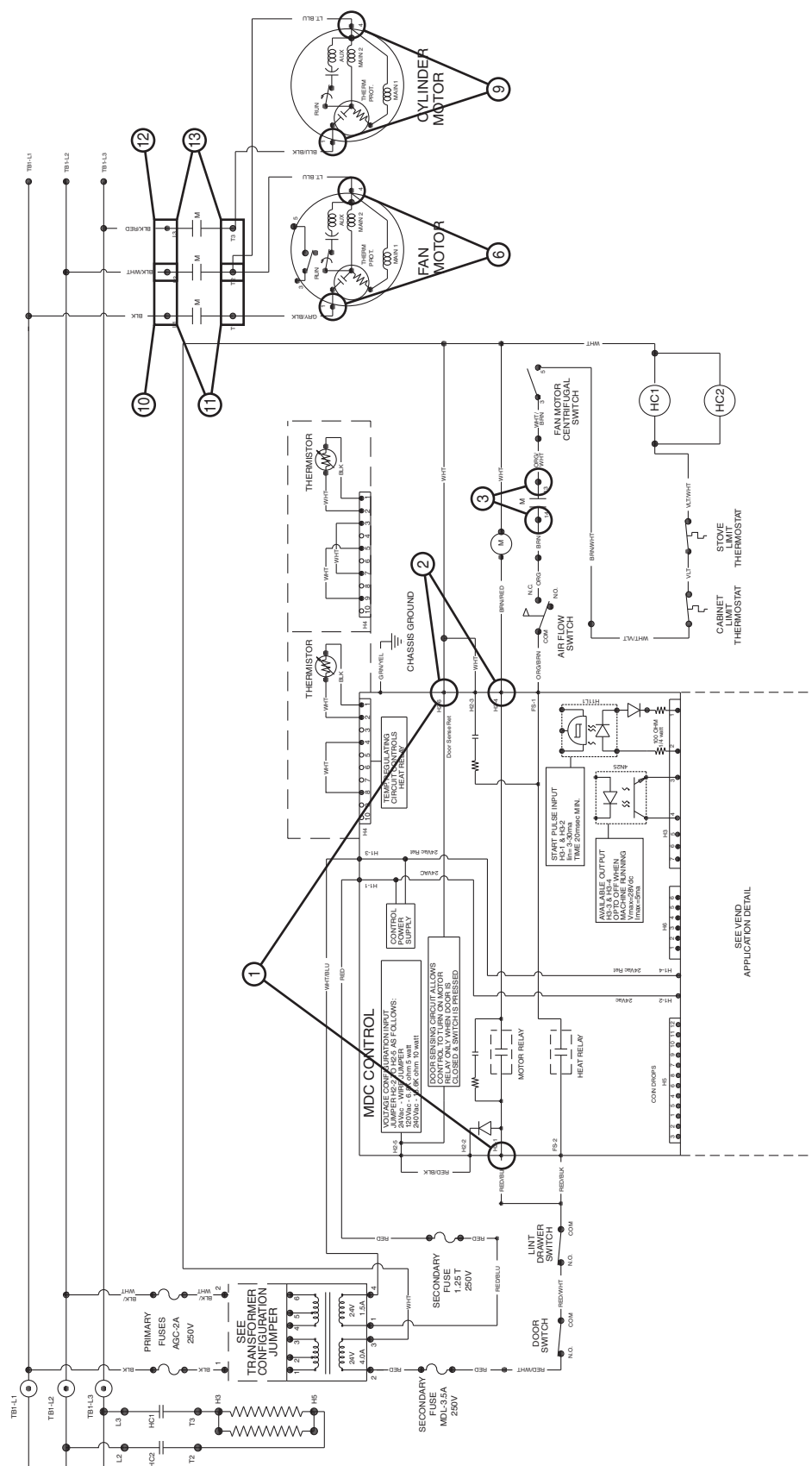


Please see following 2 pages for wiring diagram information.

## 35



## Motor Will Not Start/Run (Sheet 2 of 2)

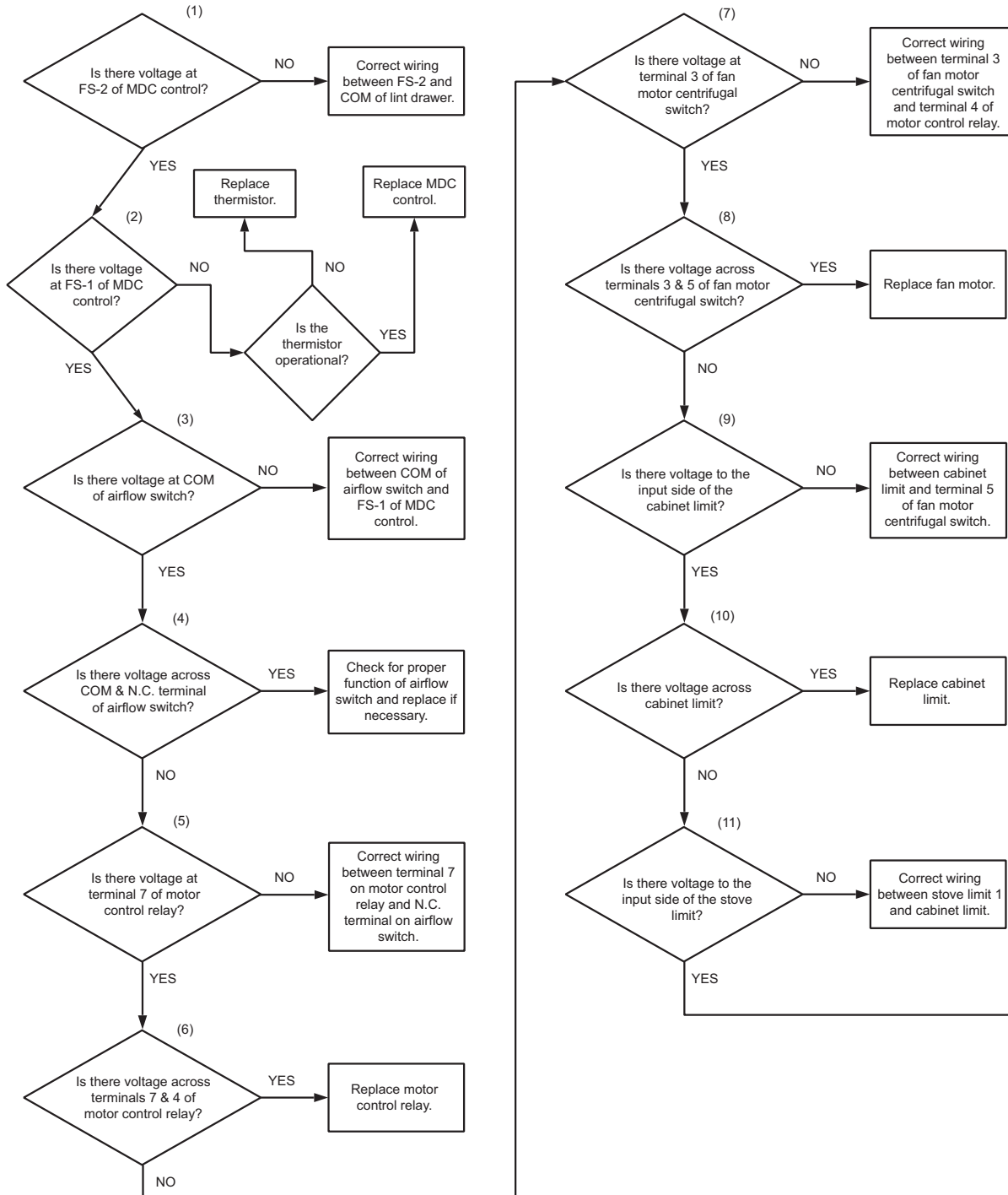


TMB1984S

## 21. Unit Will Not Heat – Gas

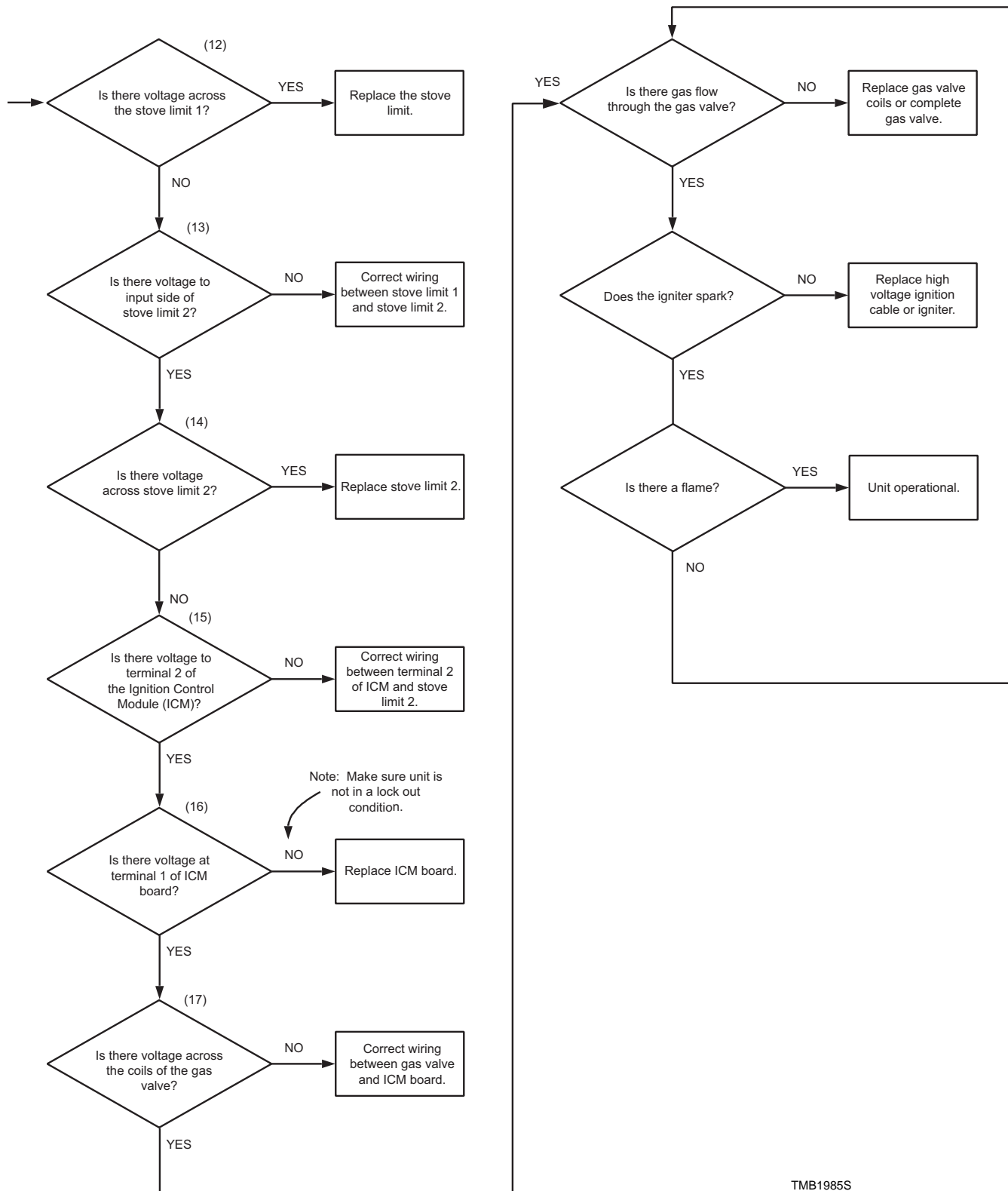
Note: Tests are conducted with unit running and calling for heat.

All voltage checks are referenced to transformer neutral.



TMB1985S

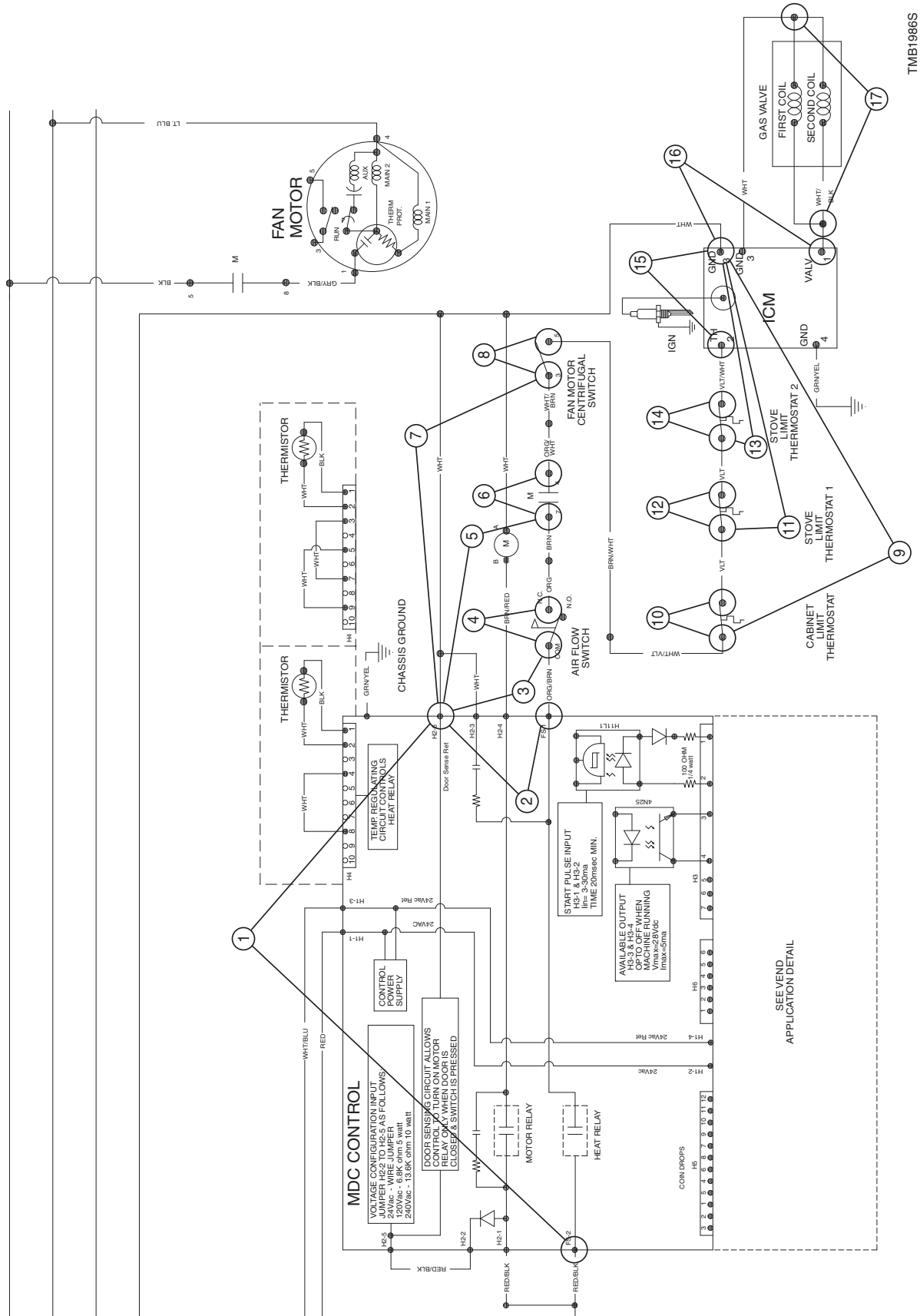
## 21. Unit Will Not Heat – Gas (continued)



Please see following page for wiring diagram information.



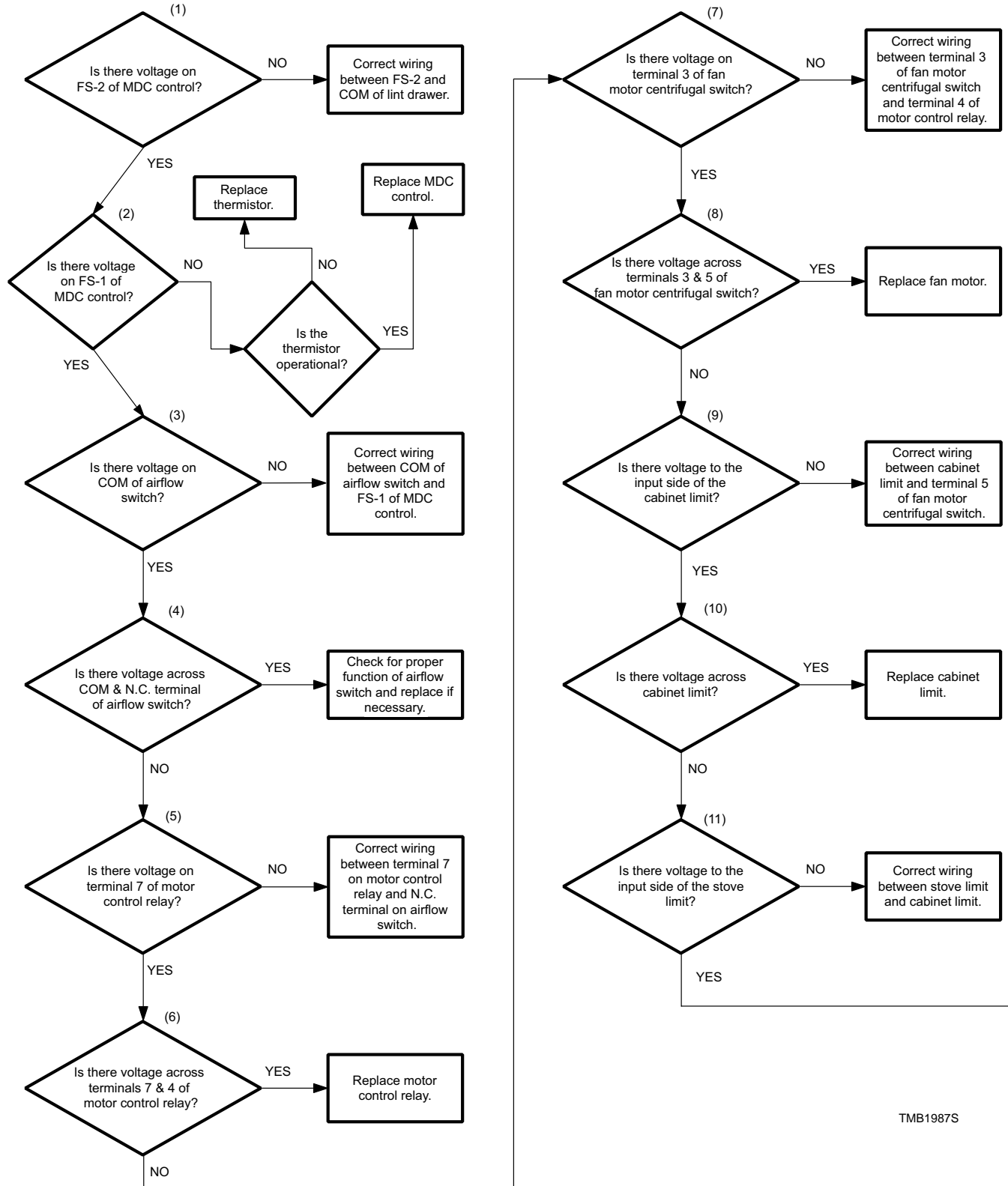
# Unit Will Not Heat – Gas



## 22. Unit Will Not Heat – Steam (T30 Models Only)

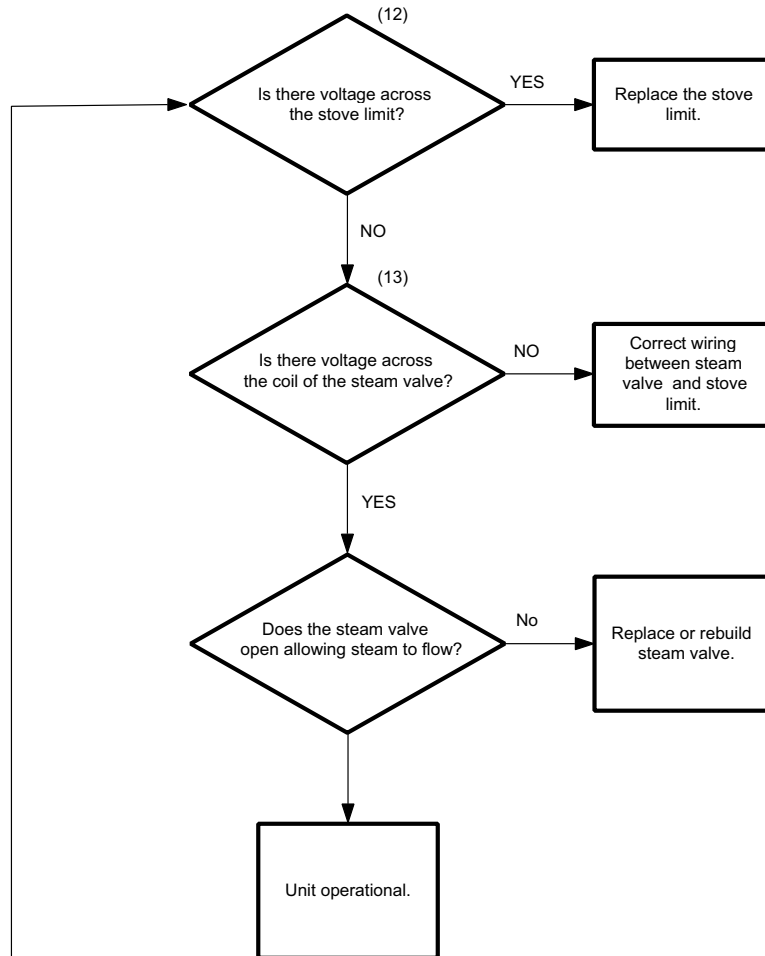
Note: Tests are conducted with unit running and calling for heat.

All voltage checks are referenced to transformer neutral.



TMB1987S

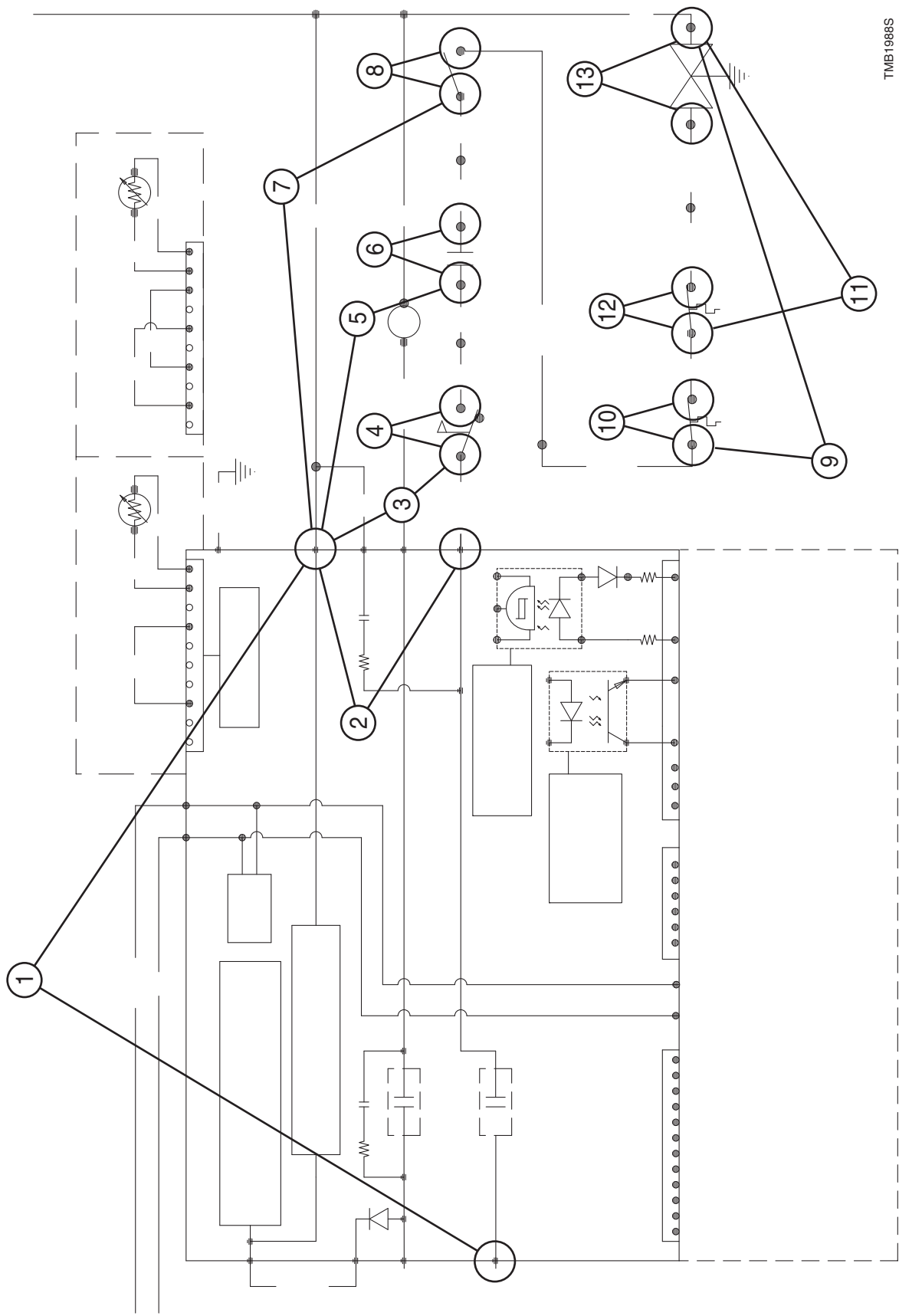
## 22. Unit Will Not Heat – Steam (T30 Models Only) (continued)



TMB1987S

Please see following page for wiring diagram information.

Unit Will Not Heat – Steam (T30 Models Only)

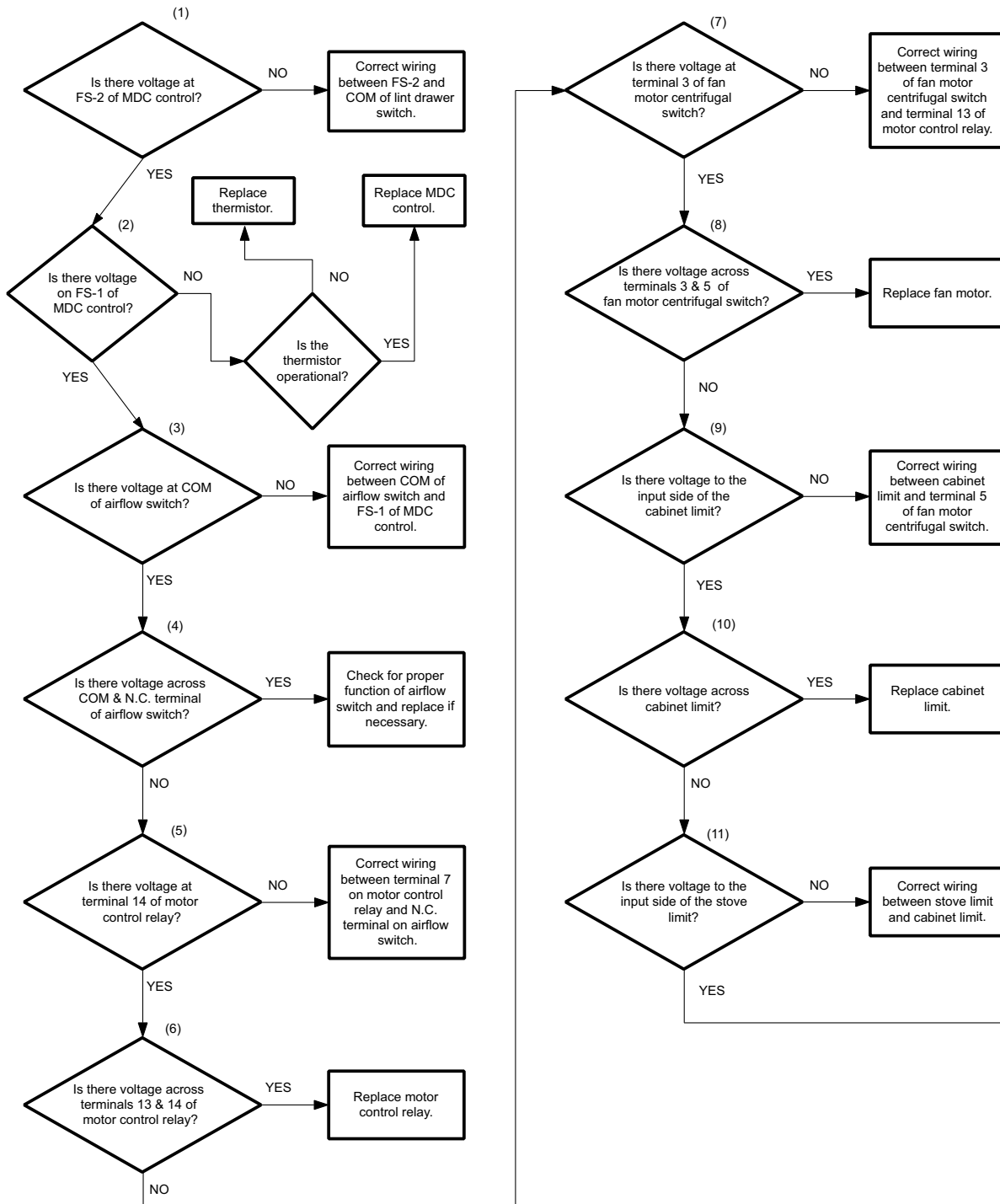


TMB1988S

## 23. Unit Will Not Heat – Electric (T30 Models Only)

Note: Tests are conducted with unit running and calling for heat.

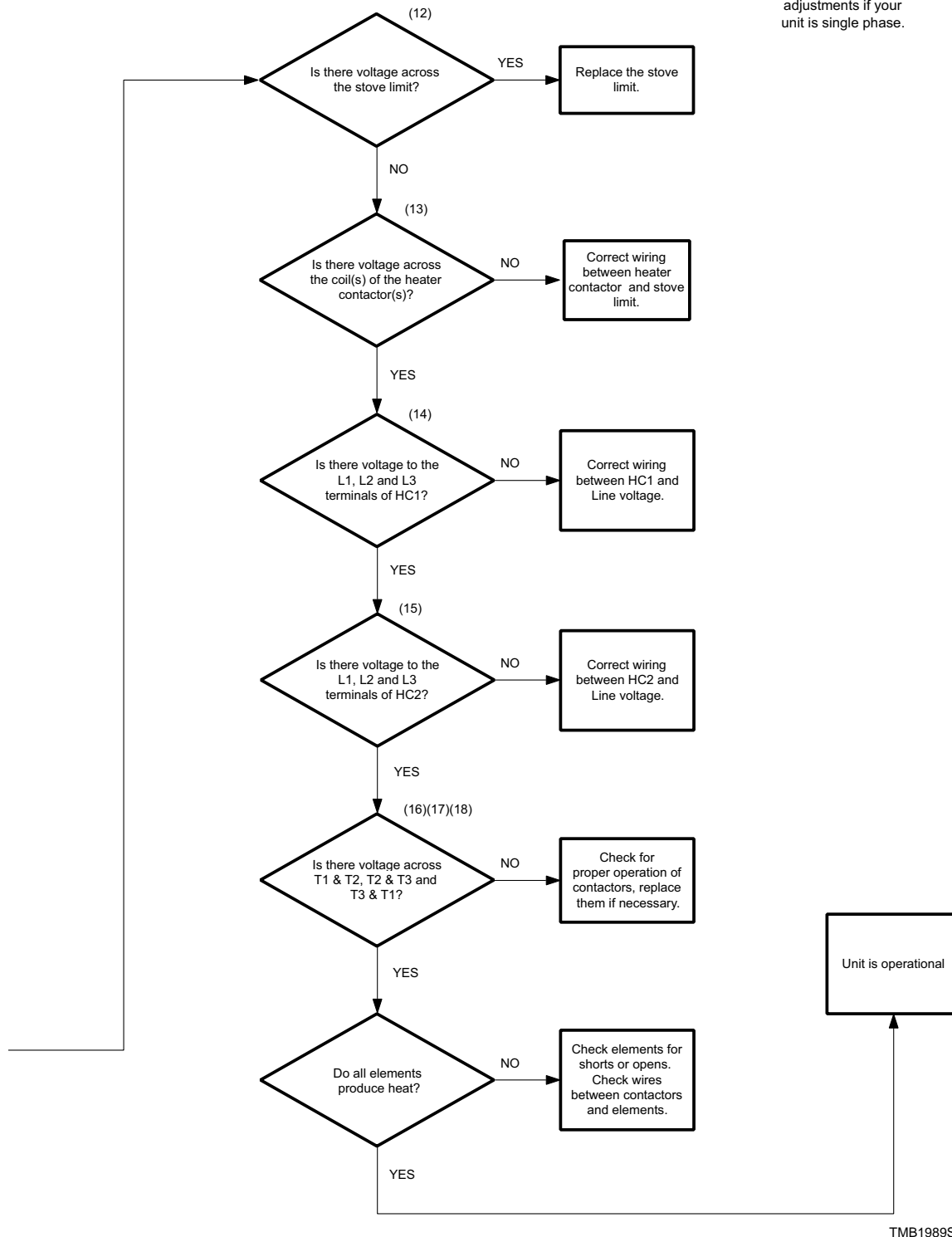
All voltage checks are referenced to transformer neutral.



TMB1989S

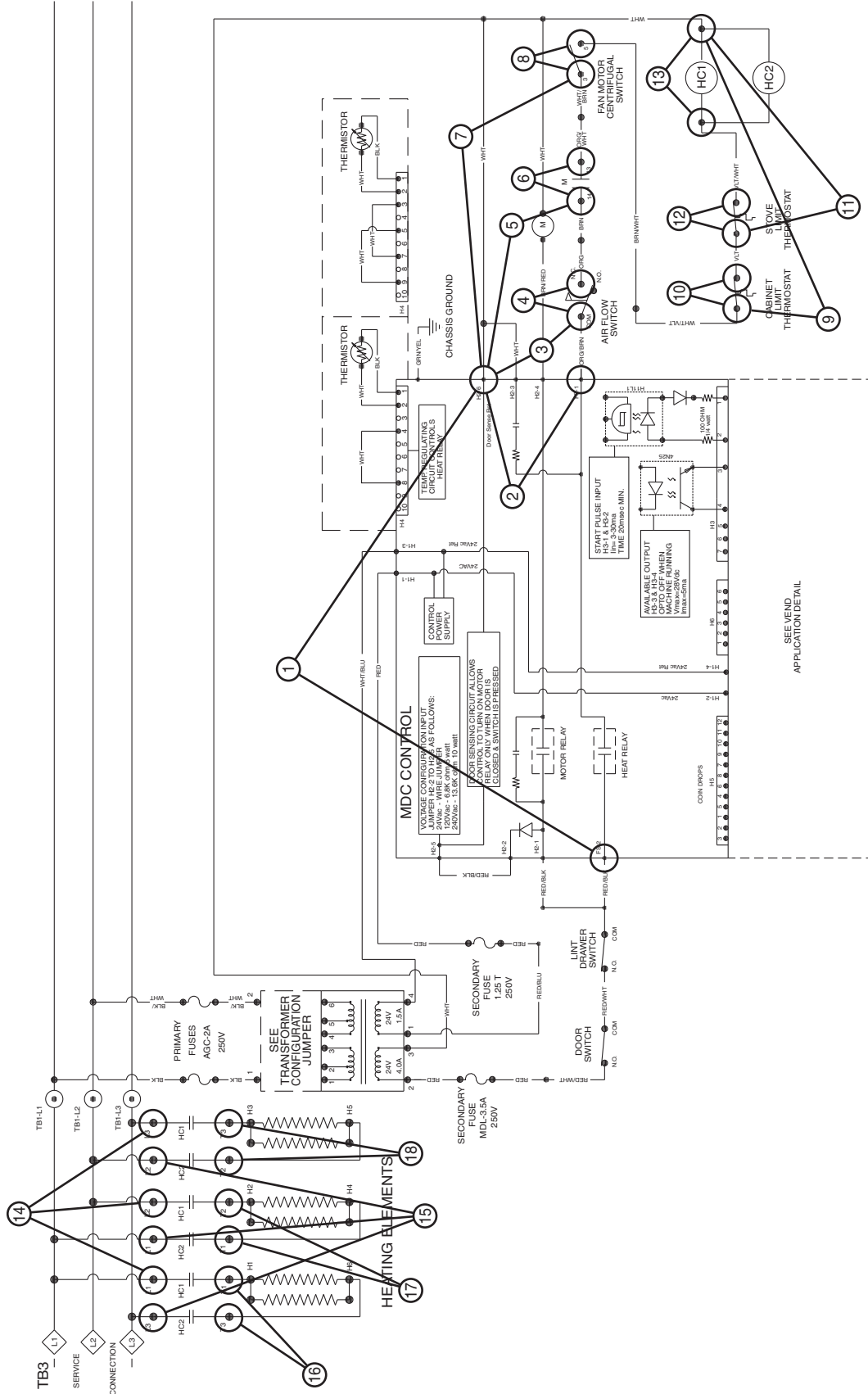
## 23. Unit Will Not Heat – Electric (T30 Models Only) (continued)

Note: Please make the appropriate adjustments if your unit is single phase.



Please see following page for wiring diagram information.

# Unit Will Not Heat – Electric (T30 Models Only)



TMB1990S



## WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

W002

## 24. Error Codes

**OP** - Indicates physical “open” in the thermistor circuit. Possible causes are: 1) thermistor, 2) wiring between control and thermistor, 3) control.

**SH** - Indicates a “short” in the thermistor circuit. Possible causes are: 1) shorted thermistor, 2) a short in the wiring between control and thermistor, 3) control.

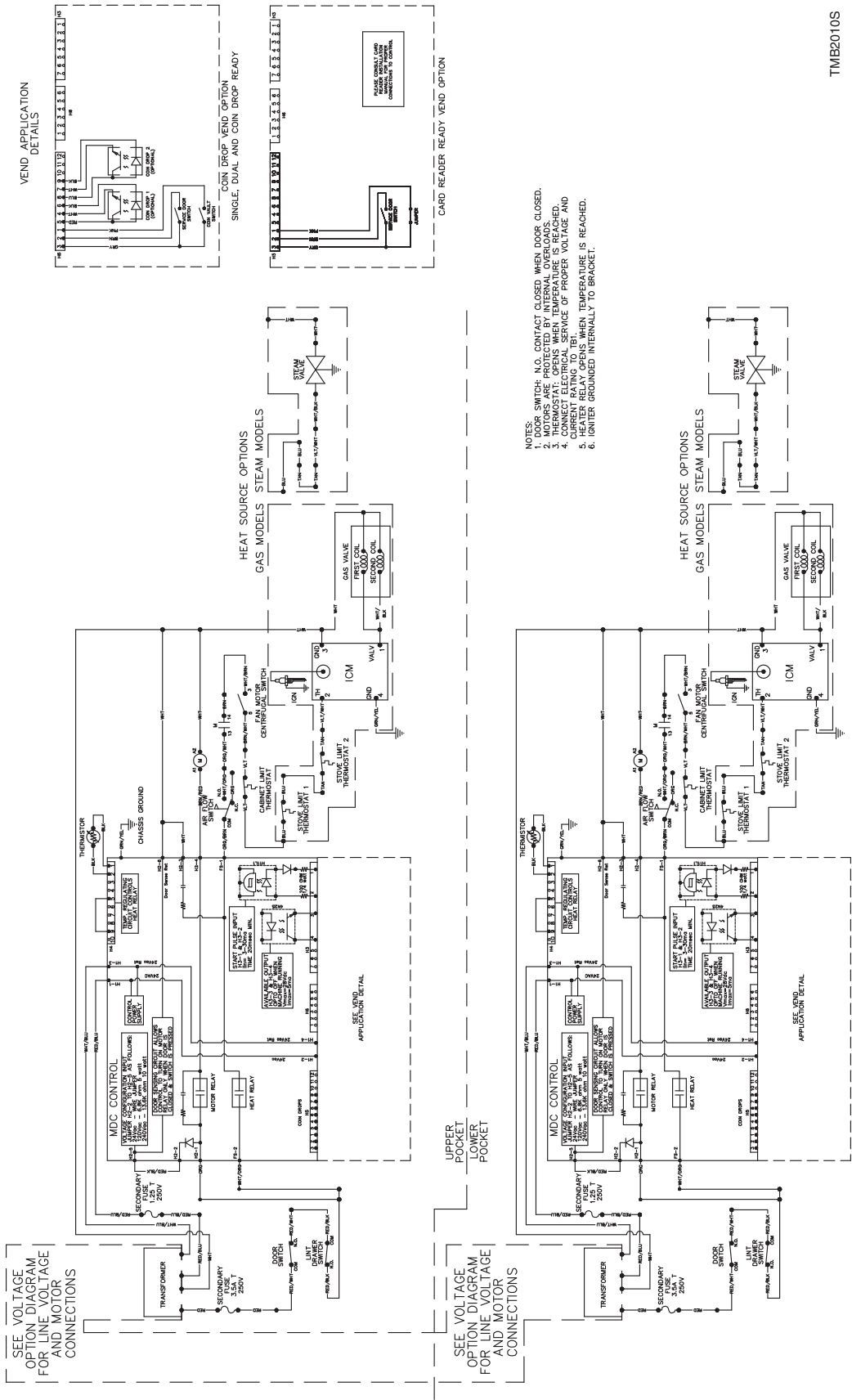
**Card Reader Machines:** (In addition to the above errors)

**EC:19** - Indicates no card reader communication. The control and the reader cannot communicate. Check reader, control and harness.

**NOTE: For all other card reader errors, consult the card reader manual provided by the manufacturer.**

Display	Definition	Corrective Action
OP	Indicates an open circuit in the thermistor.	<ul style="list-style-type: none"> <li>• Check thermistor. Replace if inoperative.</li> <li>• Check wiring between control and thermistor. Refer to wiring diagram for proper wiring.</li> <li>• Check control. Replace if inoperative.</li> </ul>
SH	Indicates a short circuit in the thermistor.	<ul style="list-style-type: none"> <li>• Check thermistor. Replace if inoperative.</li> <li>• Check wiring between control and thermistor. Refer to wiring diagram for proper wiring.</li> <li>• Check control. Replace if inoperative.</li> </ul>
EC:19 *Card Reader models only	Indicates no communication between control and card reader.	<ul style="list-style-type: none"> <li>• Check card reader. Replace if inoperative.</li> <li>• Check wire harness connecting card reader and control. Replace if inoperative.</li> <li>• Check control. Replace if inoperative.</li> </ul>

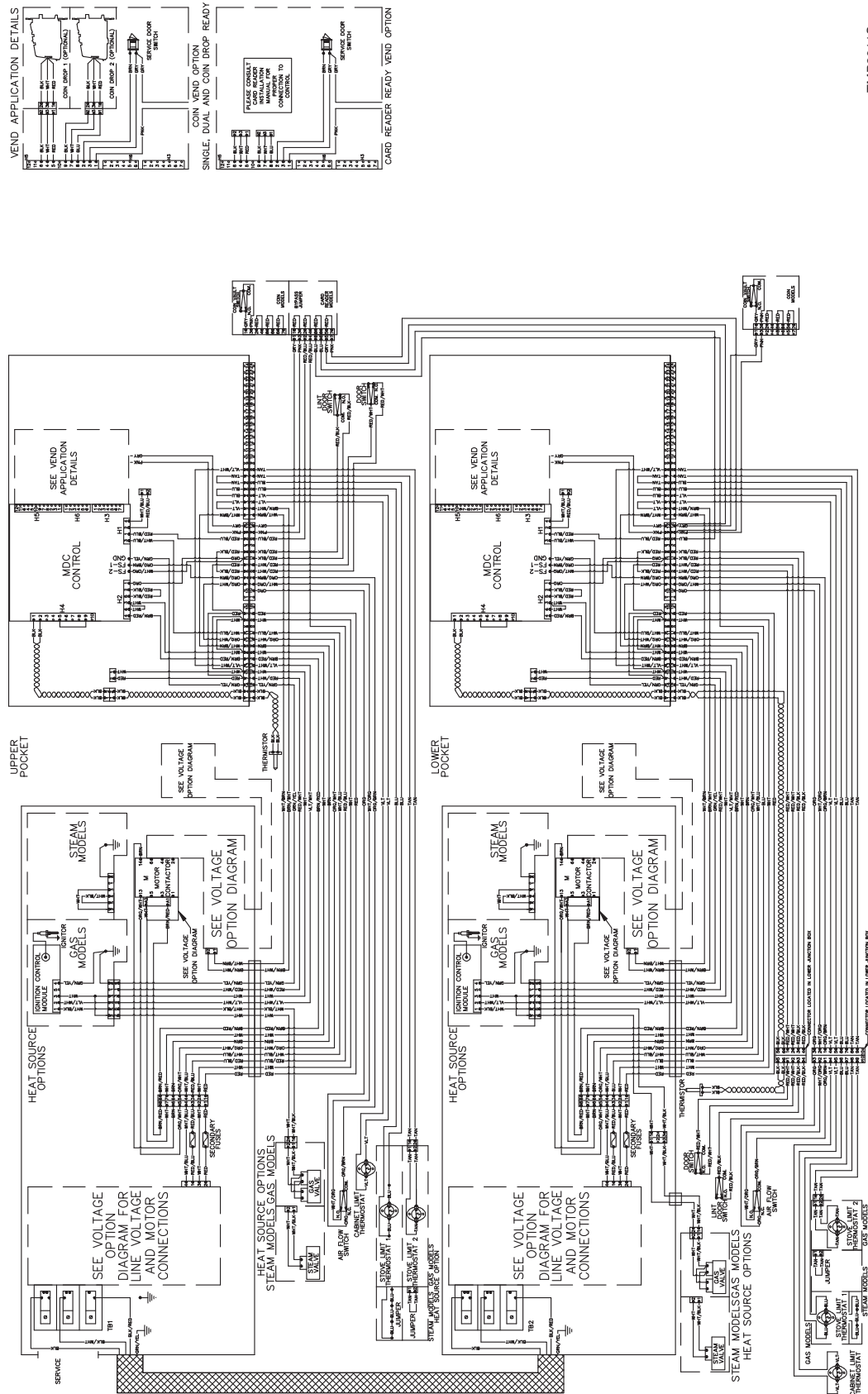




Gas and Steam Models  
Control Circuit Schematic

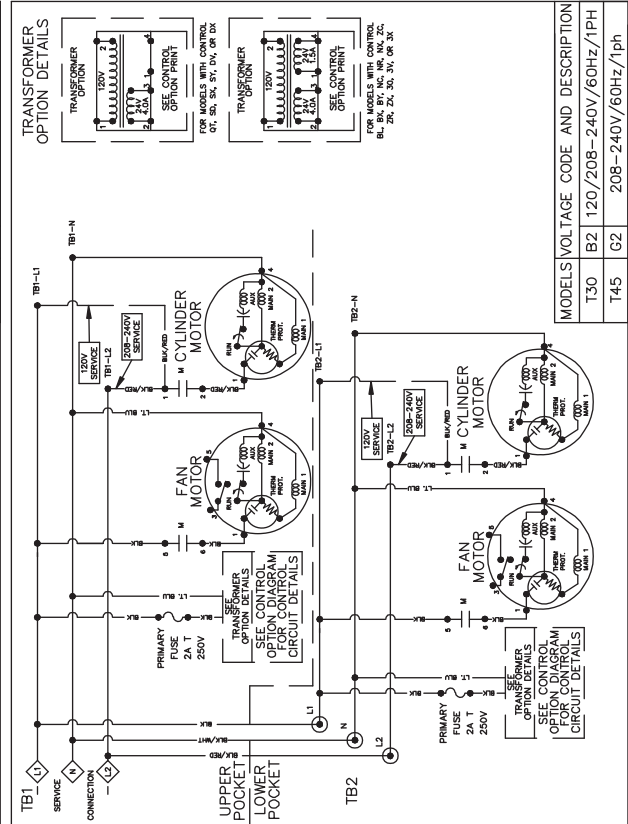
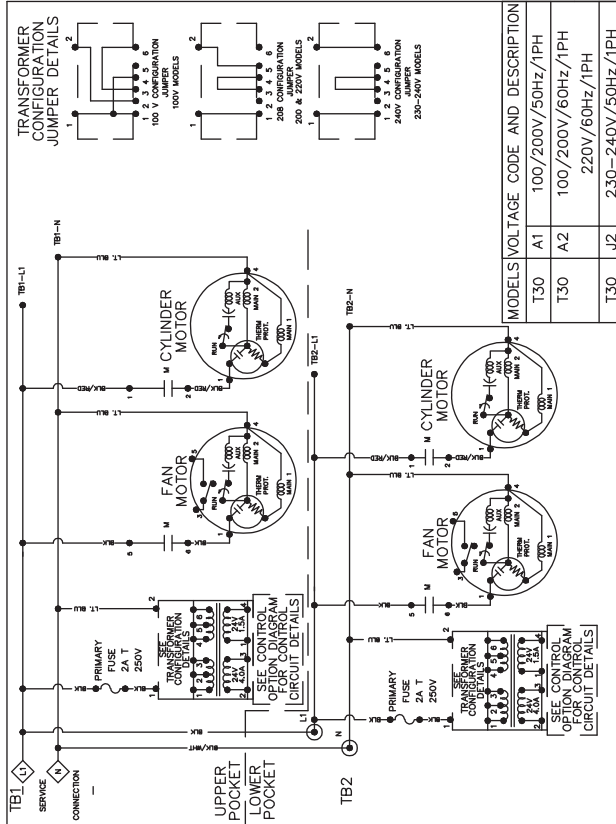
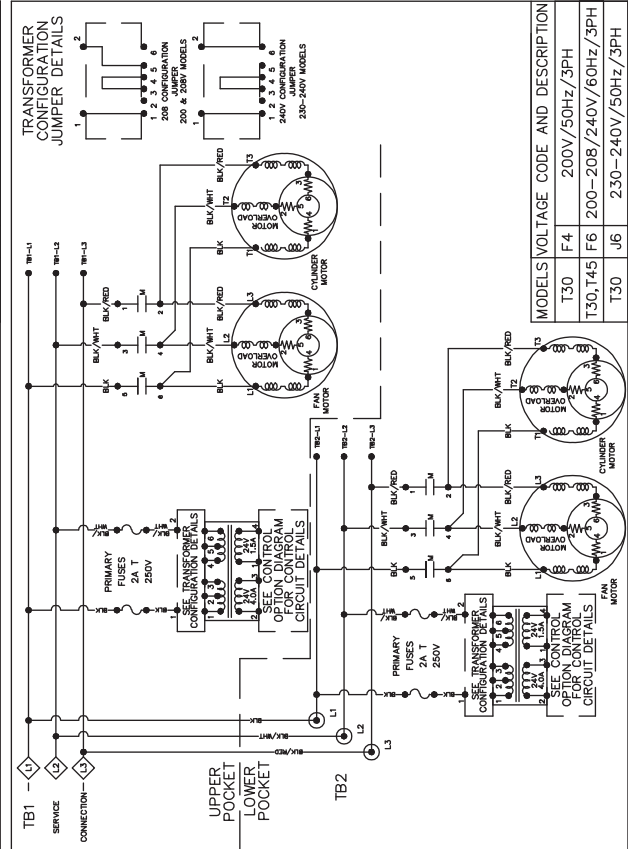
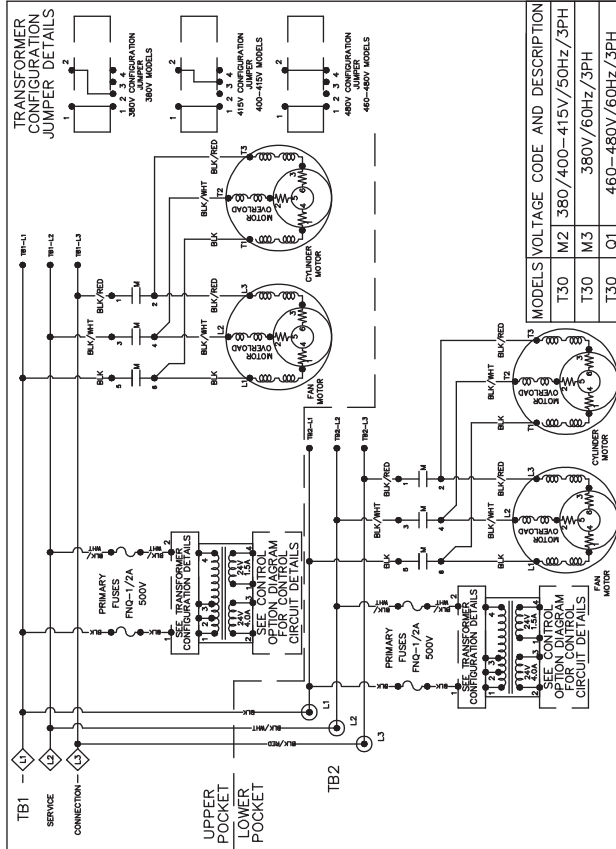
- NOTES:
1. DOOR SWITCH: N.O. CONTACT CLOSED WHEN DOOR CLOSED.
  2. LIMIT SWITCH: N.O. CONTACT CLOSED WHEN TEMPERATURE IS REACHED.
  3. THERMOSTAT: OPENS WHEN TEMPERATURE IS REACHED.
  4. CONNECT ELECTRICAL SERVICE OF PROPER VOLTAGE AND PHASE TO MOTOR.
  5. HEATER RELAY OPENS WHEN TEMPERATURE IS REACHED.
  6. GUNTER GROUNDED INTERNALLY TO BRACKET.

## Micro Display Control (MDC) Troubleshooting



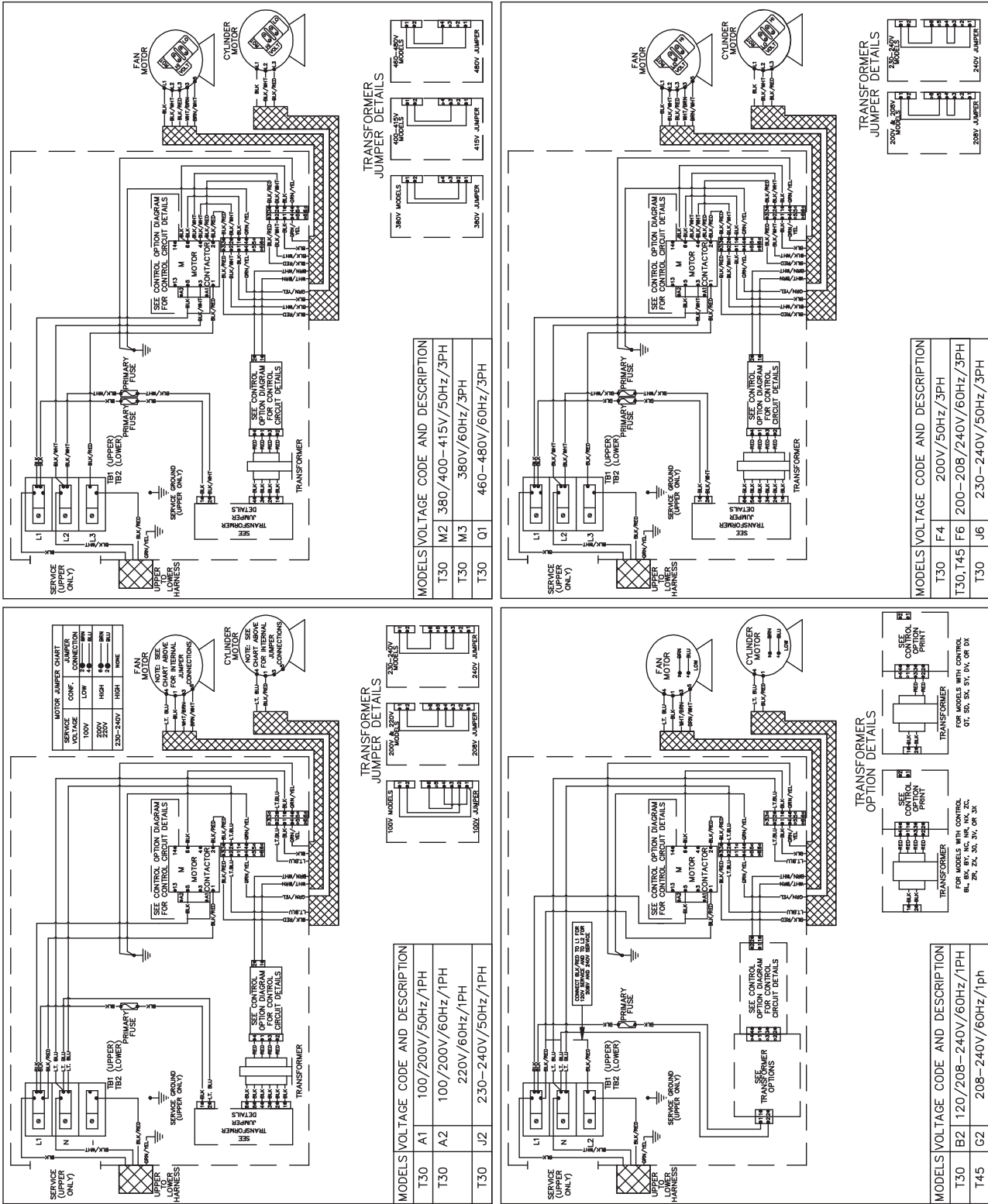
TMB2011S

**Gas and Steam Models  
Control Circuit Connection Diagram**

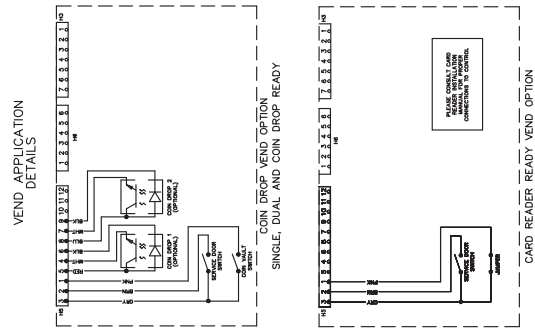


## Gas and Steam Models Control Box Schematic

TMB2012S



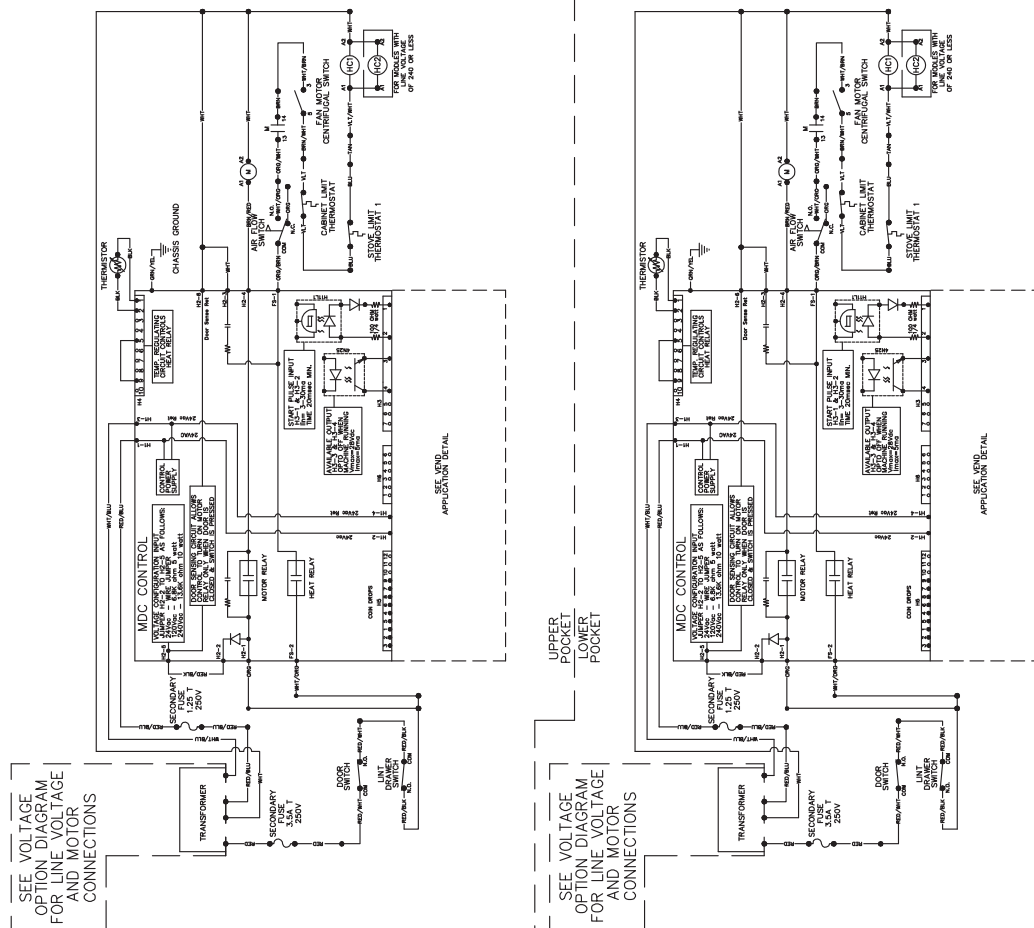
Gas and Steam Models  
Control Box Connection Diagram



TMB2014S

NOTES:

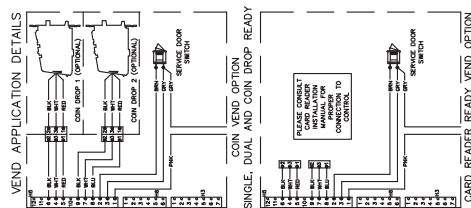
1. DOOR SWITCH: N.O. CONTACT CLOSED WHEN DOOR CLOSED.
2. MOTORS ARE PROTECTED BY INTERNAL OVERLOADS.
3. THERMOSTAT: OPENS WHEN TEMPERATURE IS REACHED.
4. CONNECT ELECTRICAL SERVICE OF PROPER VOLTAGE AND CURRENT RATING TO TBT.
5. HEATER RELAY OPENS WHEN TEMPERATURE IS REACHED.



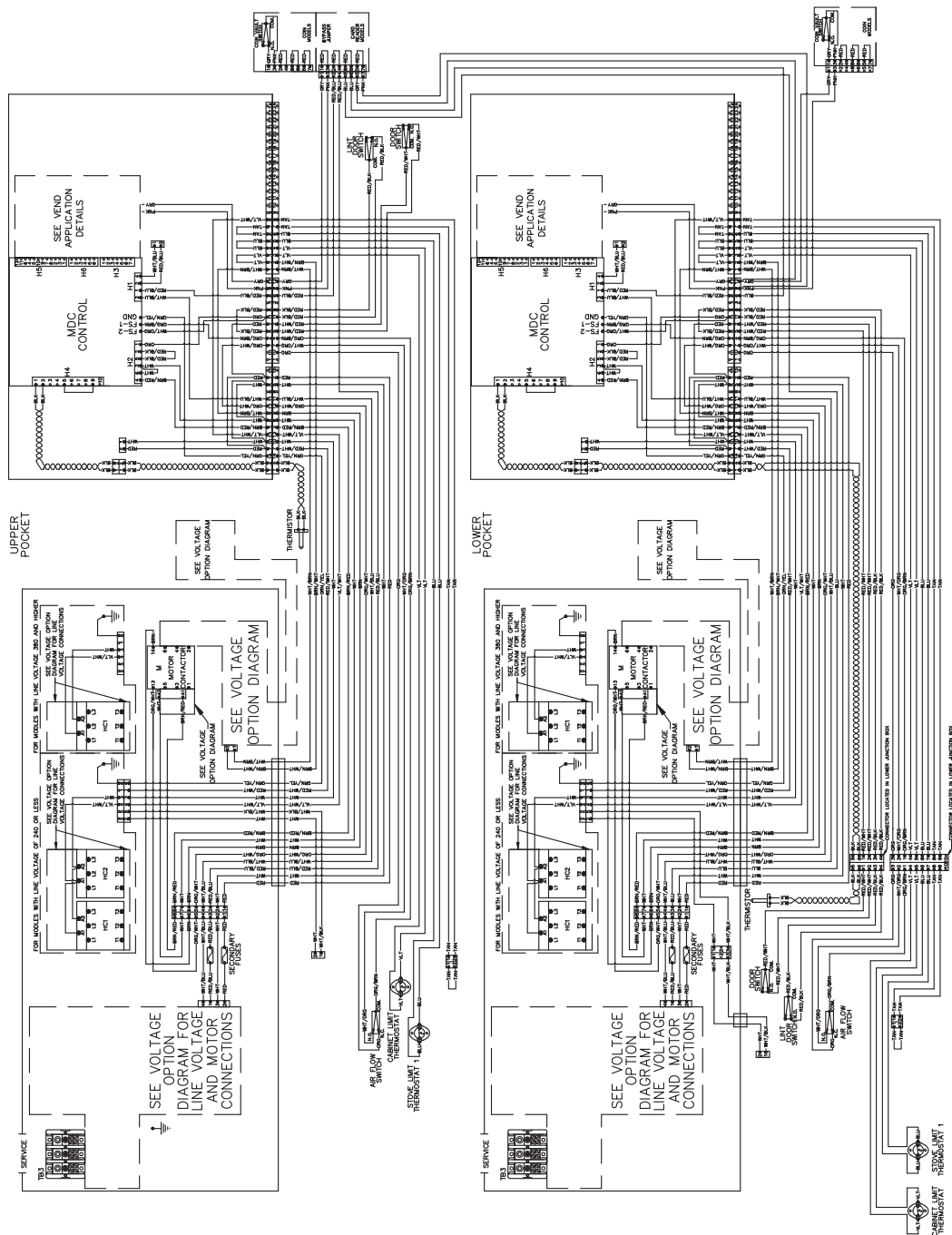
## Electric Models

### Control Circuit Schematic

## Micro Display Control (MDC) Troubleshooting



TMB2015S

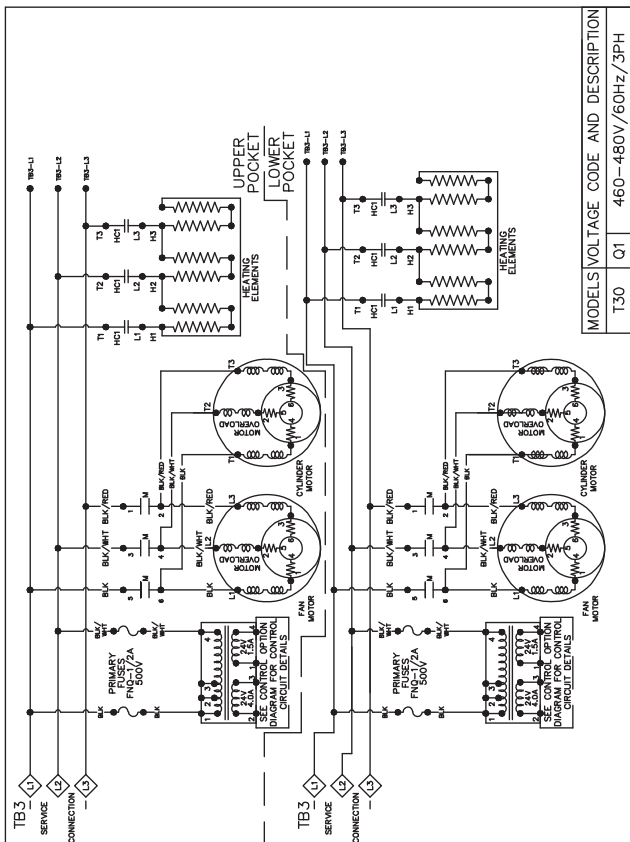
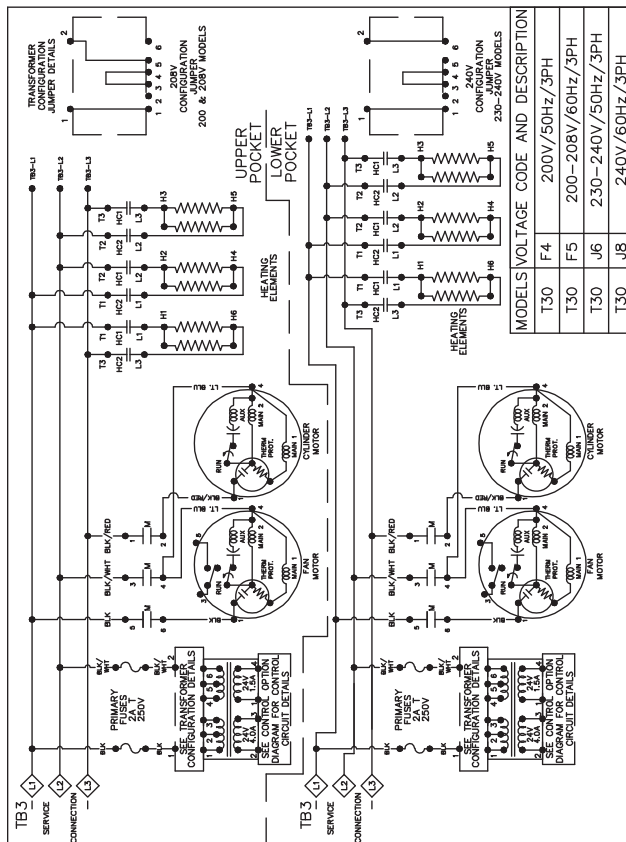
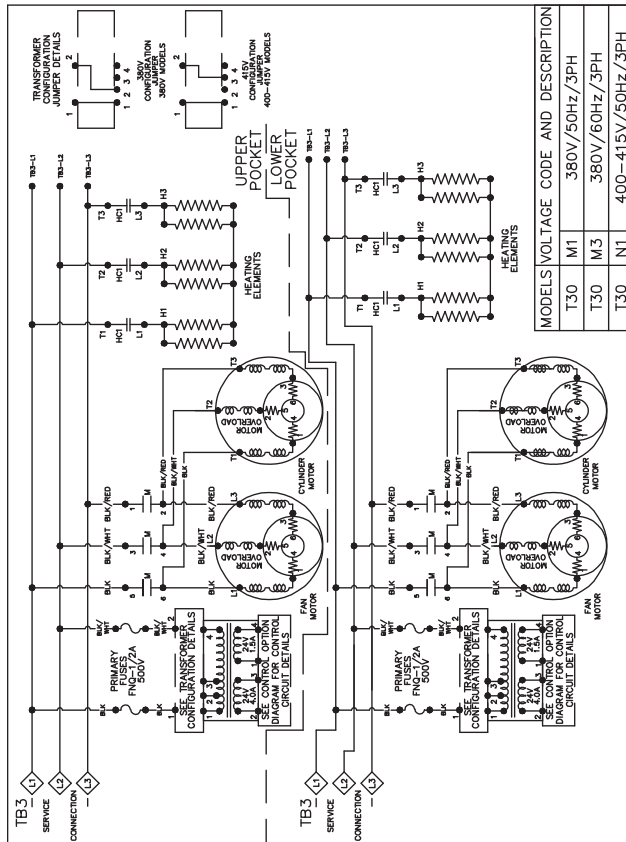


## Electric Models

### Control Circuit Connection Diagram

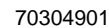
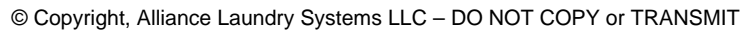


TMB2016S



## Electric Models Contactor Box Schematic

## 54



## Electric Models

### Contactor Box Connection Diagram



# Section 6

## NetMaster Troubleshooting

Models with NC, NJ, NR, NX, NY, ZC, ZR, ZX and ZY Control Suffixes



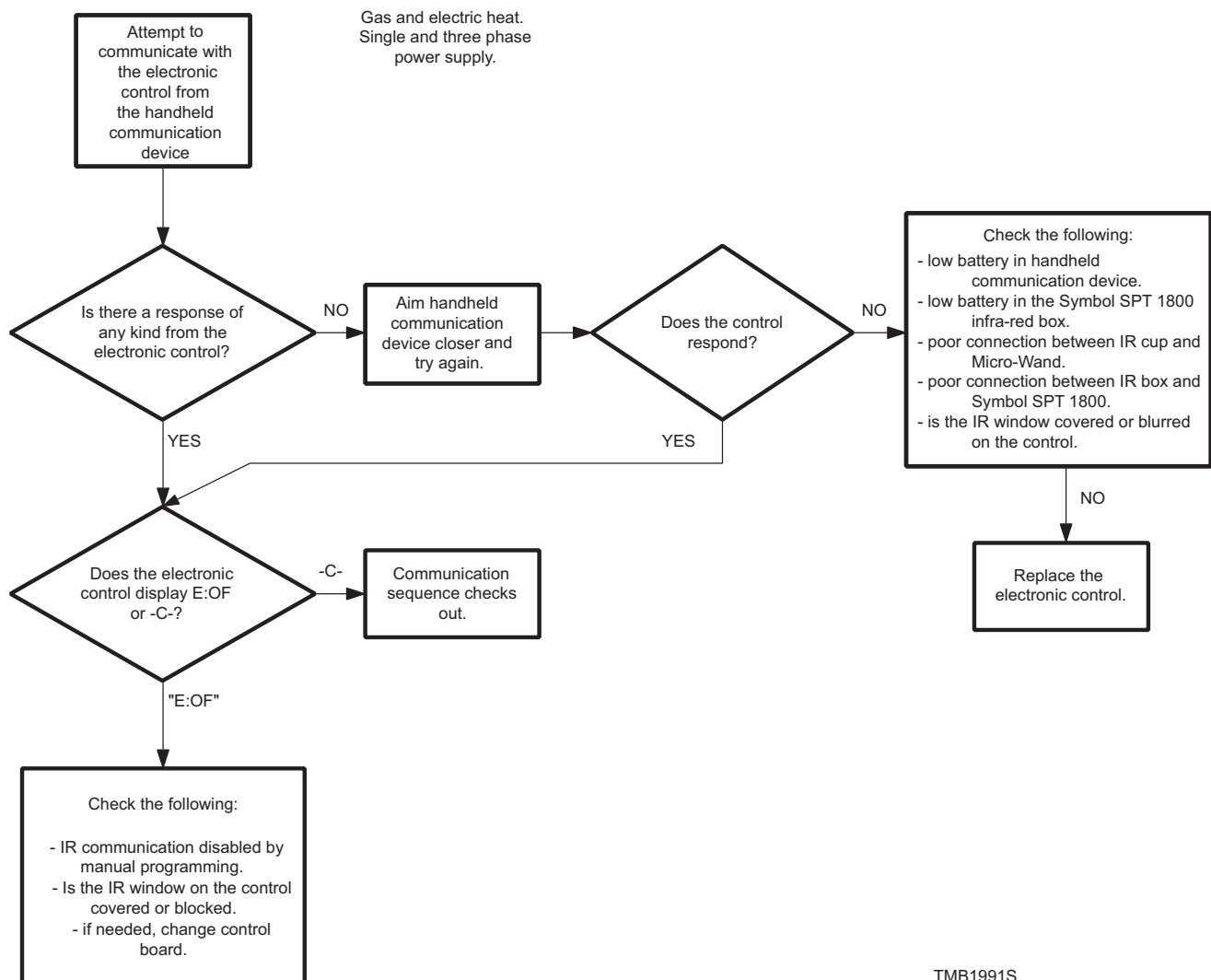
### WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

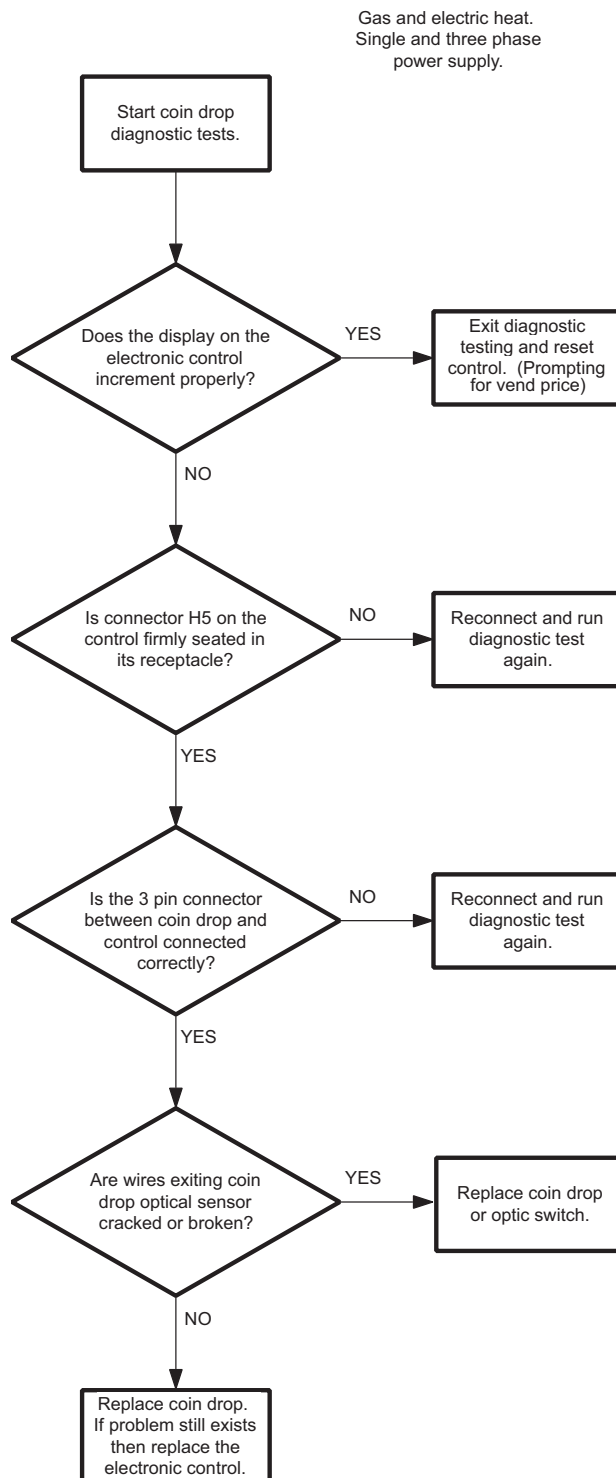
W002

### 25. No Infra-red (IR) Communication



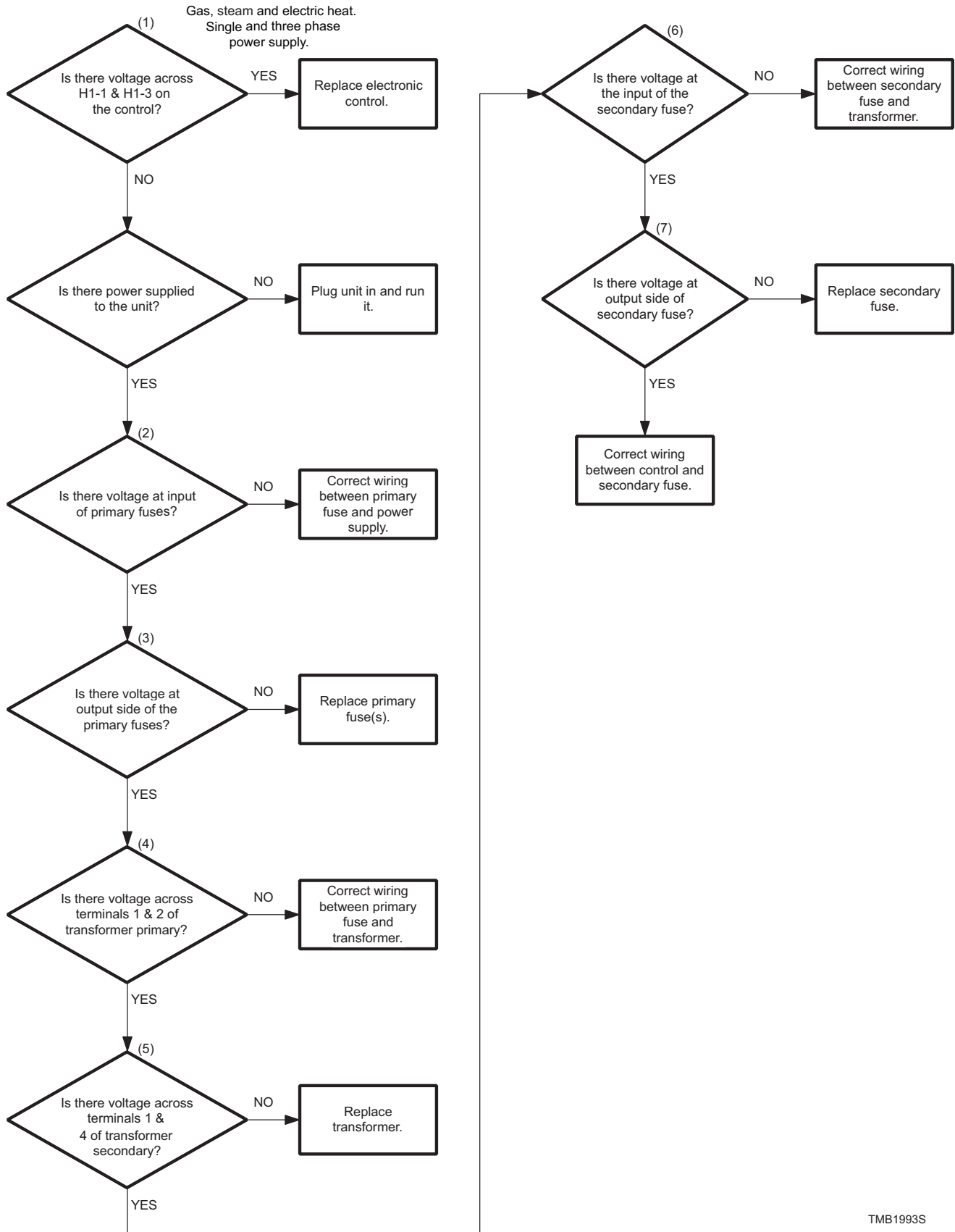
TMB1991S

## 26. Coins Ignored When Entered



TMB1992S

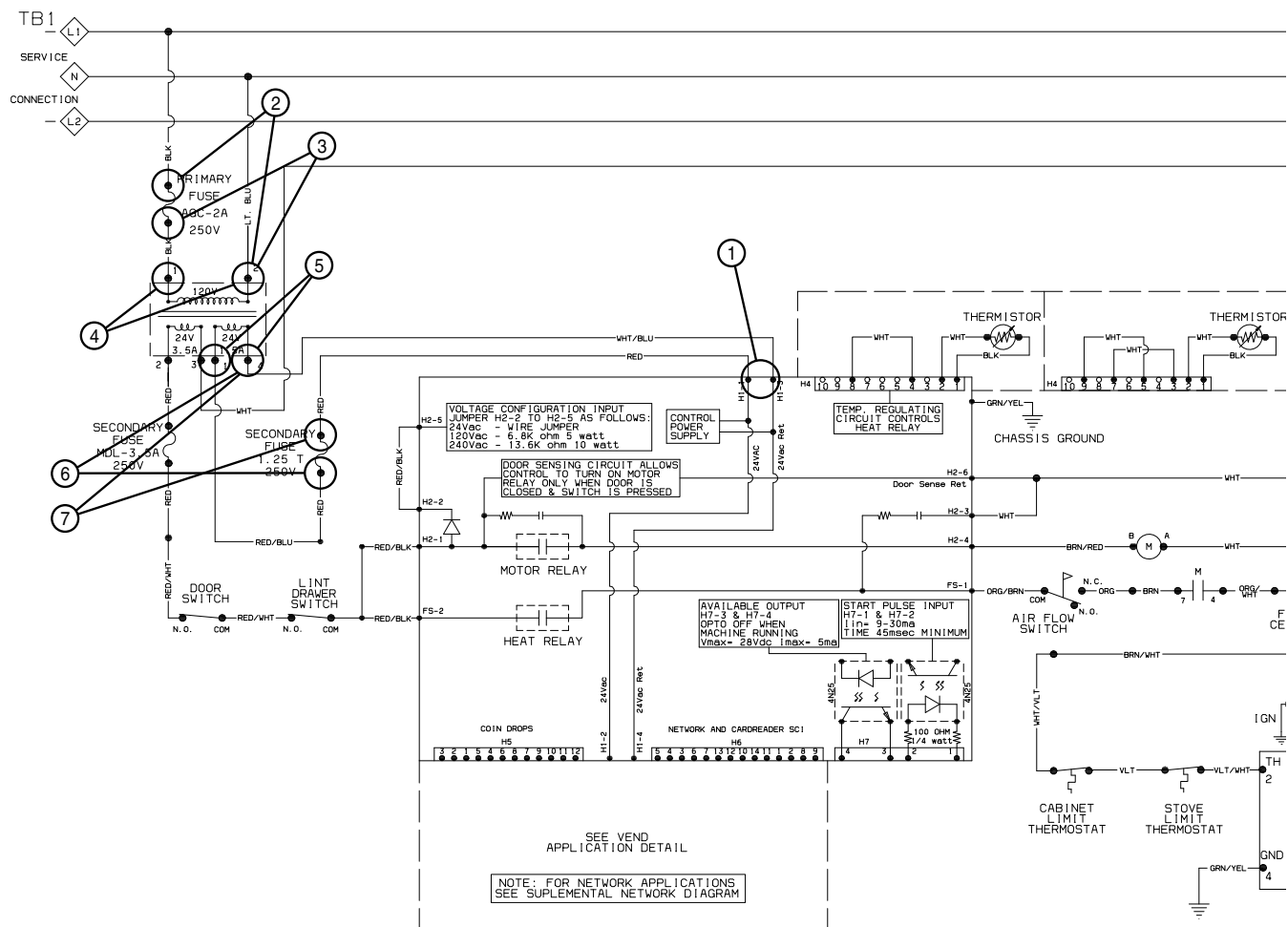
## 27. Control Has No Display



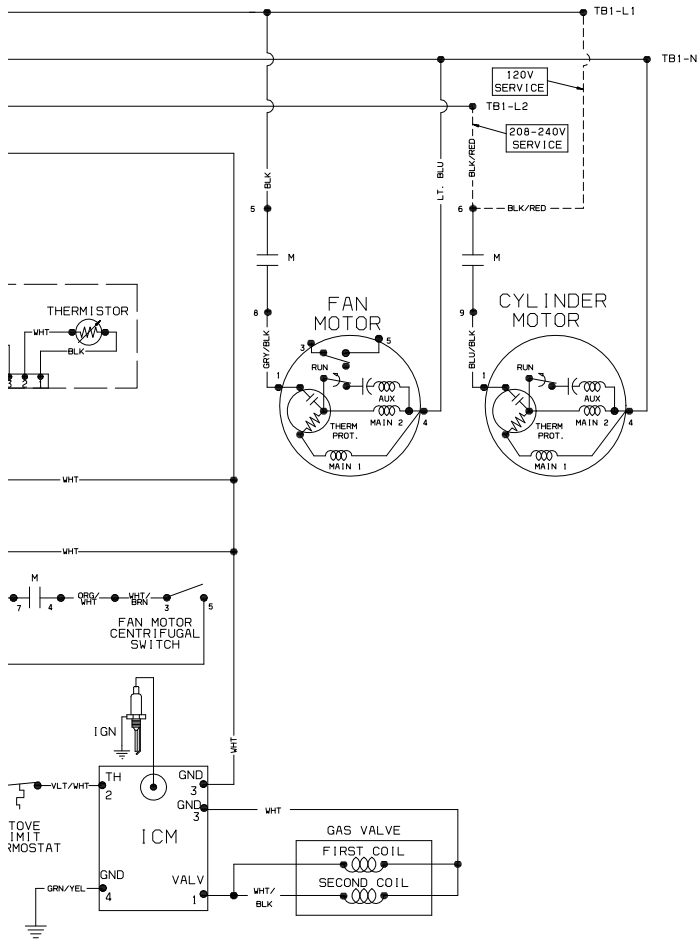
TMB1993S

Please see following 2 pages for wiring diagram information.

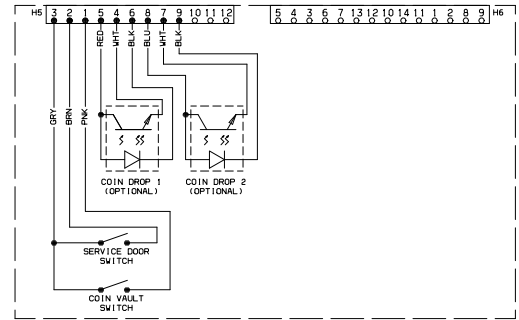
# Control Has No Display (Sheet 1 of 2)



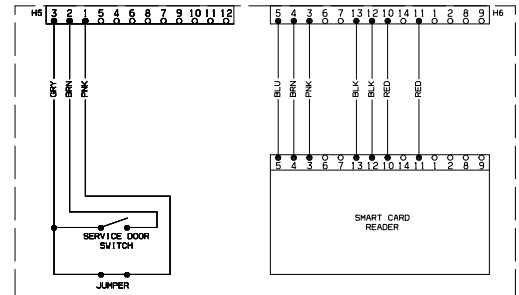
## Control Has No Display (Sheet 2 of 2)



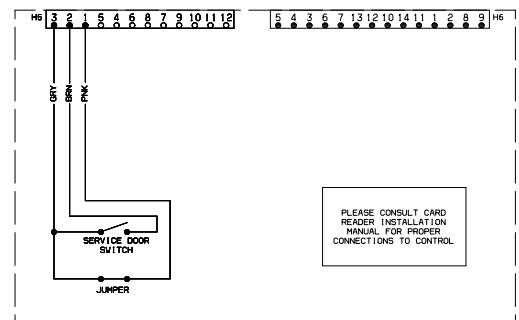
### VEND APPLICATION DETAILS



### COIN DROP VEND OPTION SINGLE, DUAL AND COIN DROP READY



### SMART CARD READER VEND OPTION



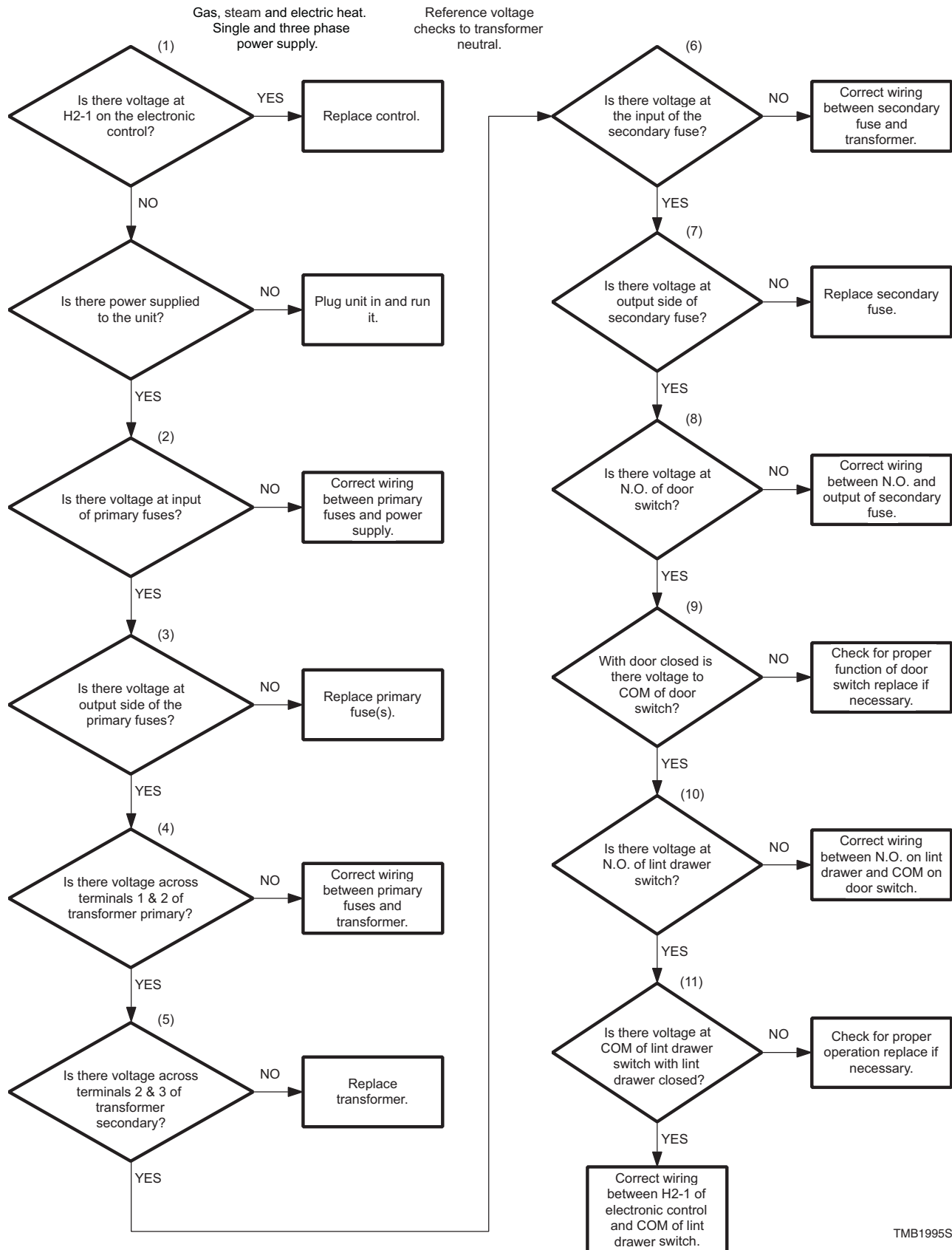
### CARD READER READY VEND OPTION

#### NOTES:

1. DOOR SWITCH - CONTACTS CLOSED WHEN DOOR CLOSED.
2. MOTOR IS PROTECTED BY INTERNAL THERMAL PROTECTOR.
3. HEATER RELAY OPENS WHEN TEMPERATURE IS REACHED.
4. IGNITER GROUNDED INTERNALLY TO BRACKET.

TMB2236S

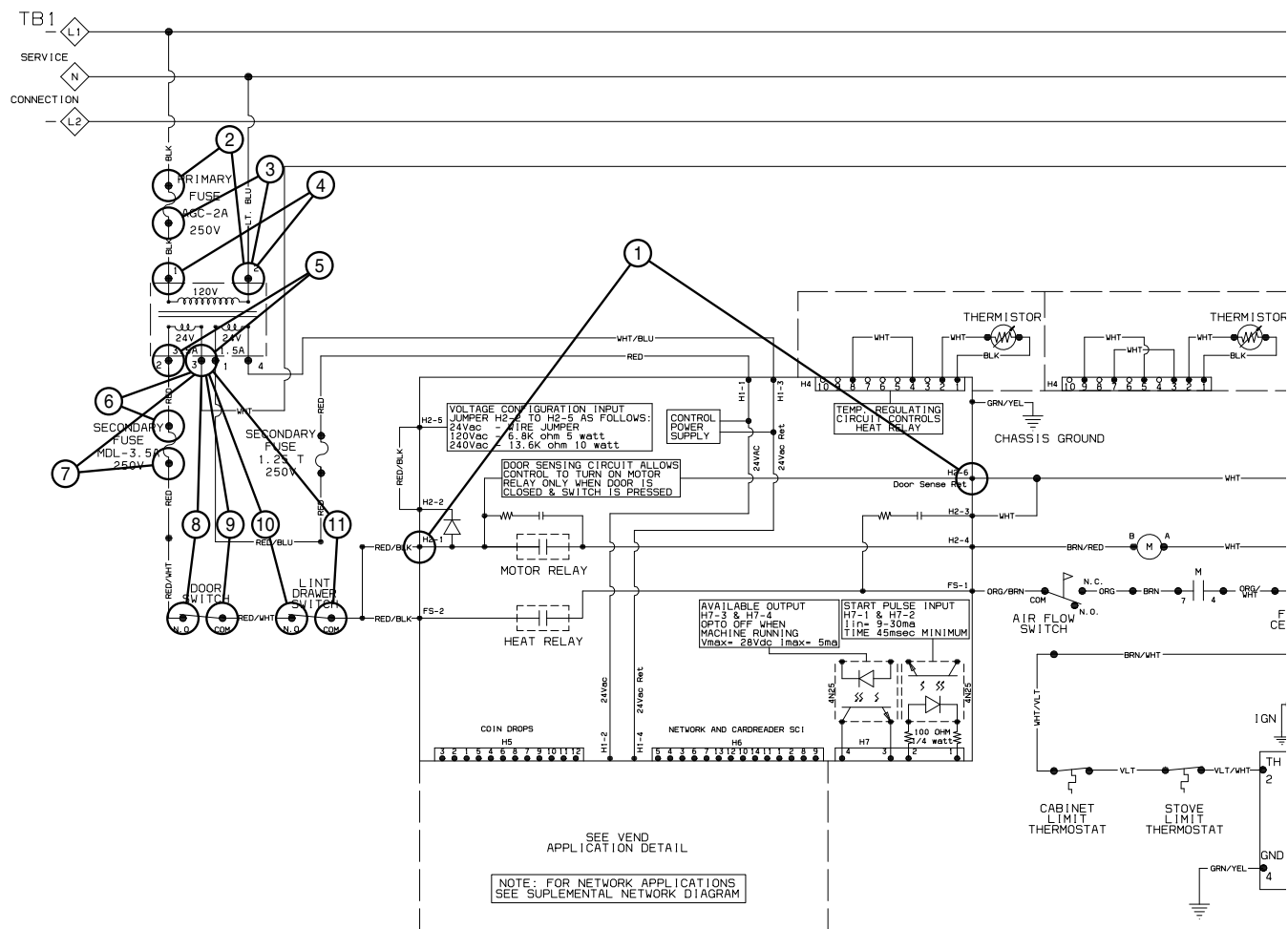
## 28. Door Open Indicator



TMB1995S

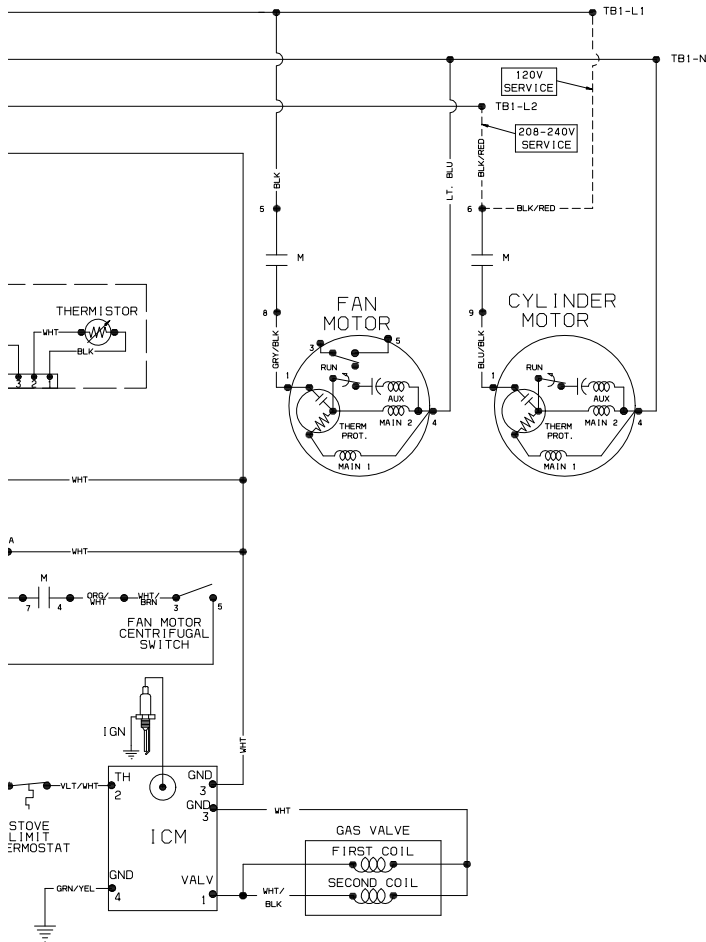
**Please see following 2 pages for wiring diagram information.**

# Door Open Indicator (Sheet 1 of 2)

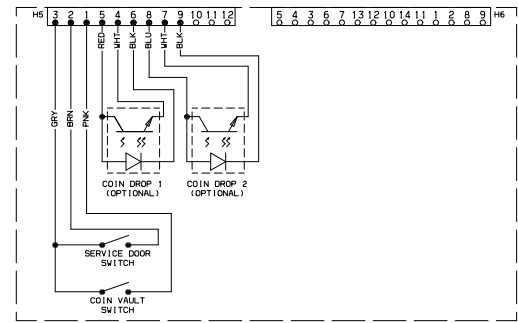




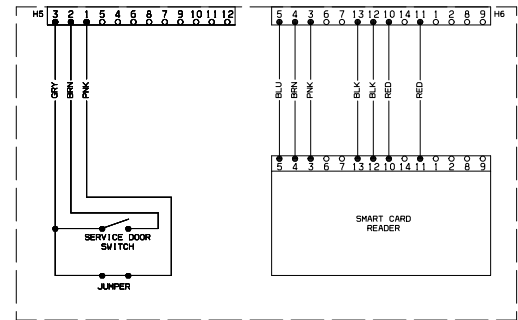
## Door Open Indicator (Sheet 2 of 2)



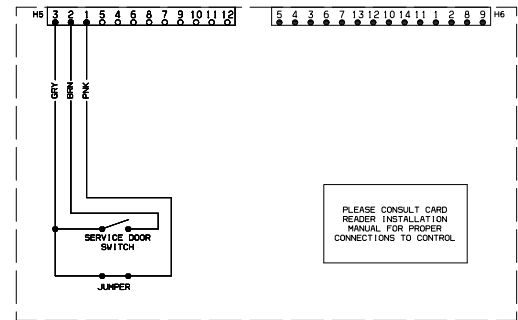
### VEND APPLICATION DETAILS



COIN DROP VEND OPTION  
SINGLE, DUAL AND COIN DROP READY



SMART CARD READER VEND OPTION



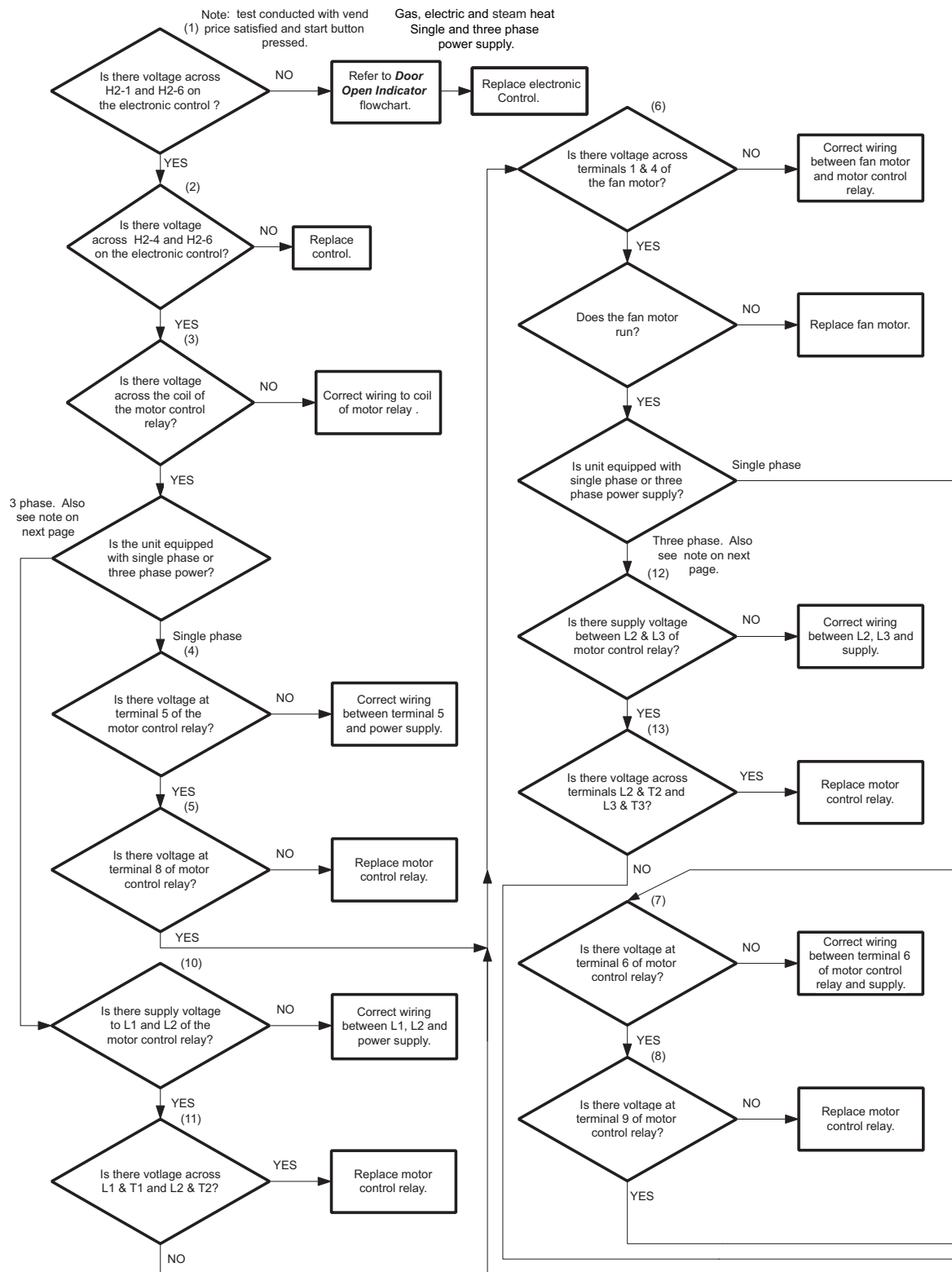
CARD READER READY VEND OPTION

#### NOTES:

1. DOOR SWITCH - CONTACTS CLOSED WHEN DOOR CLOSED.
2. MOTOR IS PROTECTED BY INTERNAL THERMAL PROTECTOR.
3. HEATER RELAY OPENS WHEN TEMPERATURE IS REACHED.
4. IGNITER GROUNDED INTERNALLY TO BRACKET.

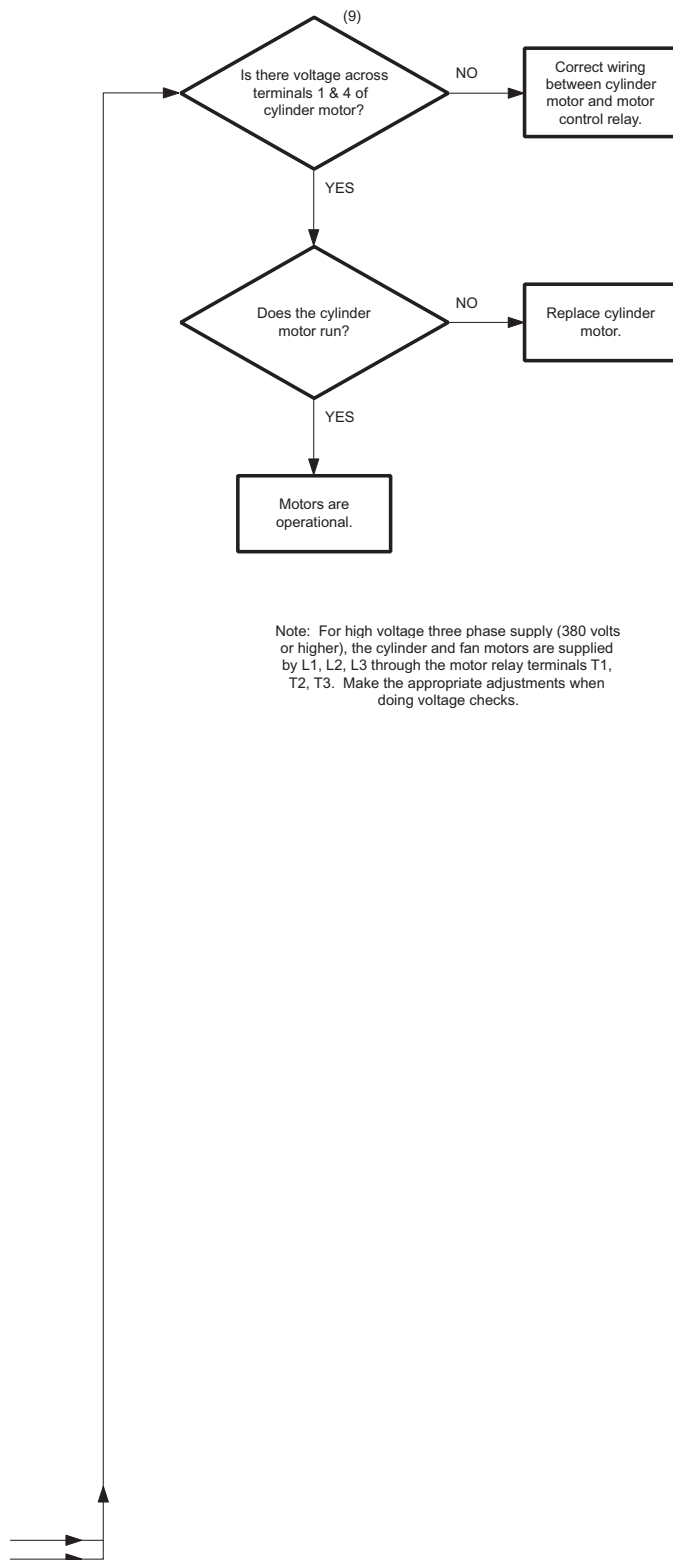
TMB2237S

## 29. Motor Will Not Start/Run



Note: tests conducted with vend price satisfied and start button pressed.

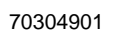
## 29. Motor Will Not Start/Run (continued)



TMB1997S

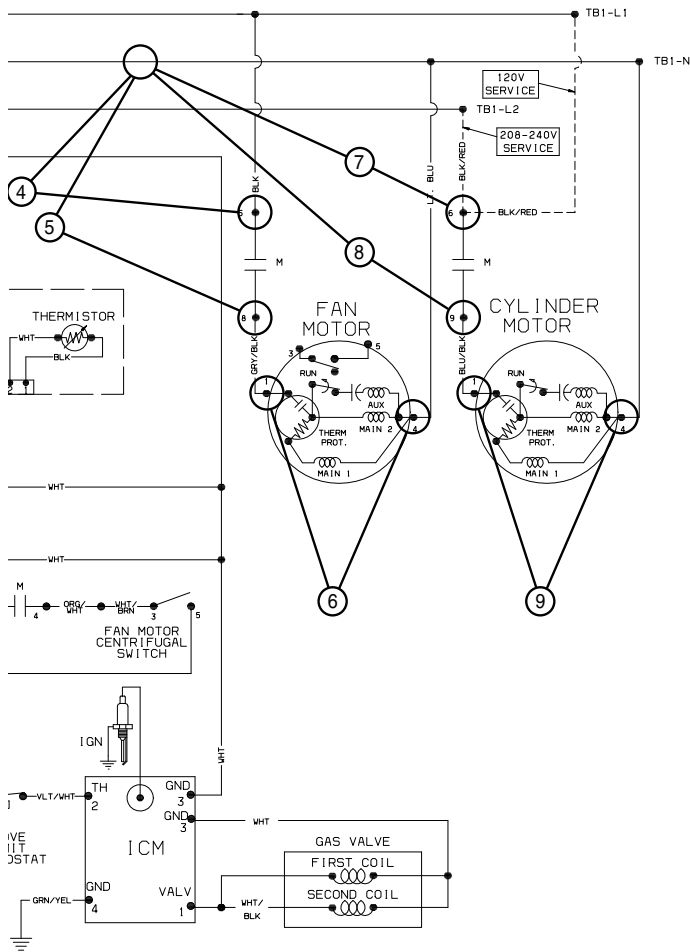
**Please see following 4 pages for wiring diagram information.**

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

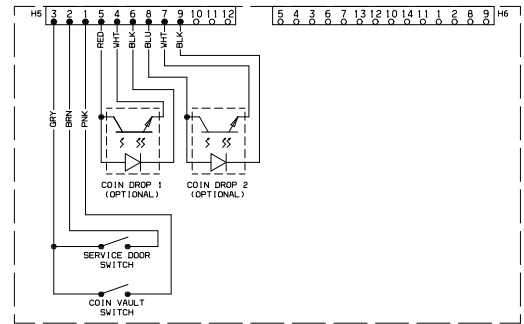


## Motor Will Not Start/Run (Sheet 2 of 2)

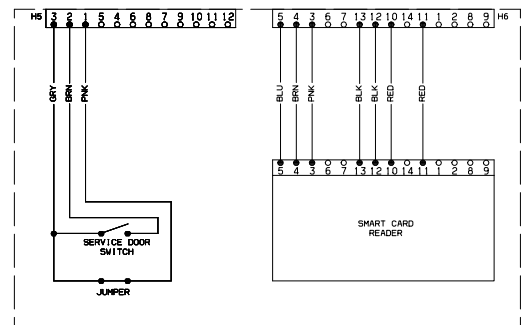
### 1 Phase Models



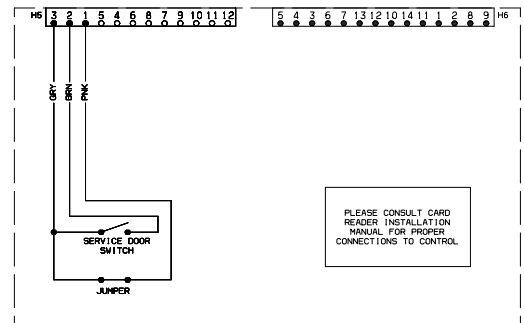
#### VEND APPLICATION DETAILS



#### COIN DROP VEND OPTION SINGLE, DUAL AND COIN DROP READY



#### SMART CARD READER VEND OPTION



#### CARD READER READY VEND OPTION

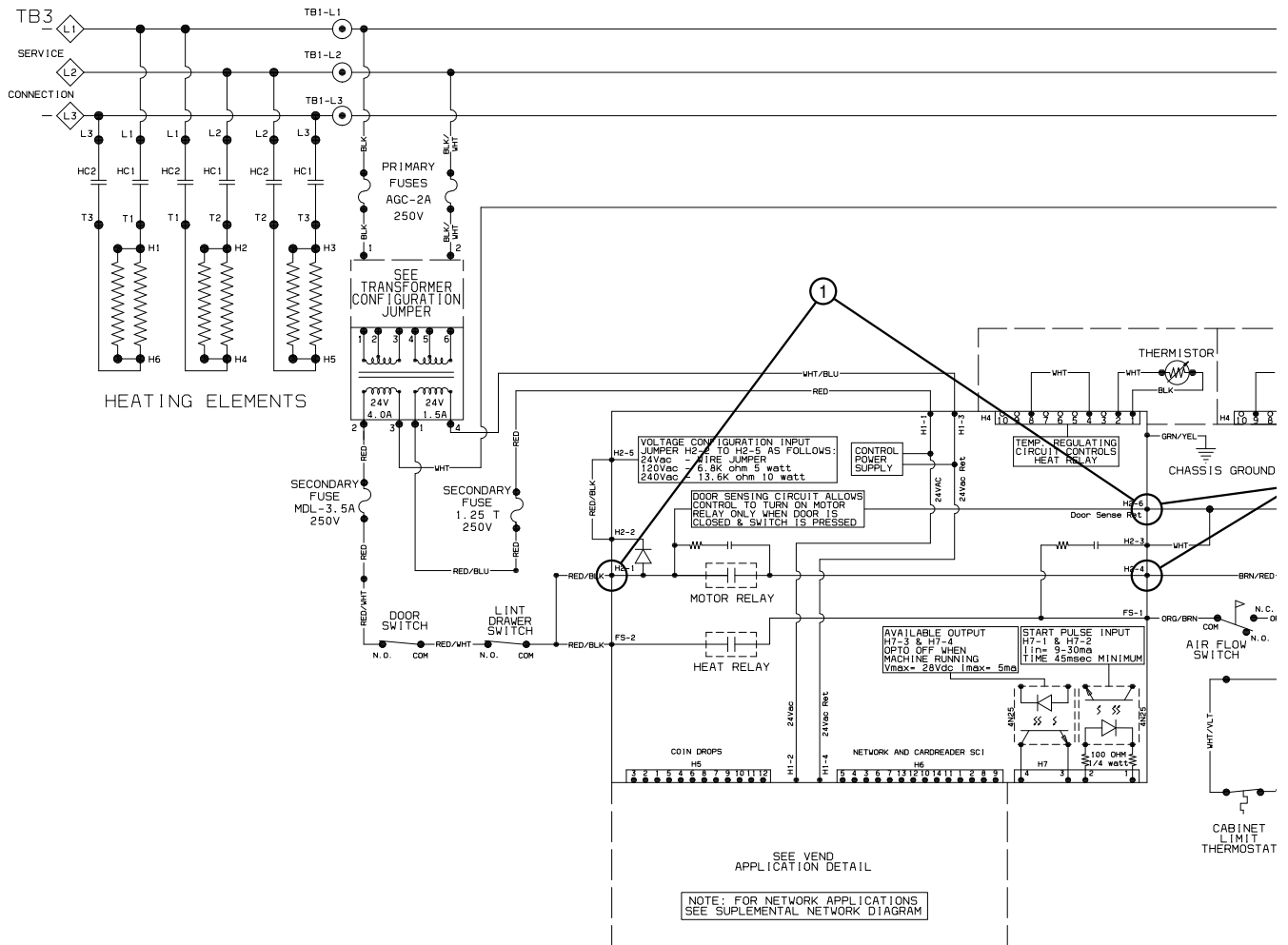
#### NOTES:

1. DOOR SWITCH - CONTACTS CLOSED WHEN DOOR CLOSED.
2. MOTOR IS PROTECTED BY INTERNAL THERMAL PROTECTOR.
3. HEATER RELAY OPENS WHEN TEMPERATURE IS REACHED.
4. IGNITER GROUNDED INTERNALLY TO BRACKET.

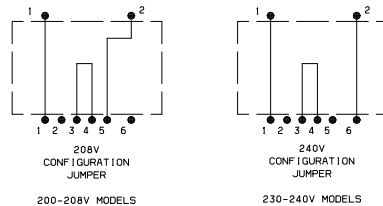
TMB2238S

## Motor Will Not Start (Sheet 1 of 2)

### 3 Phase Models

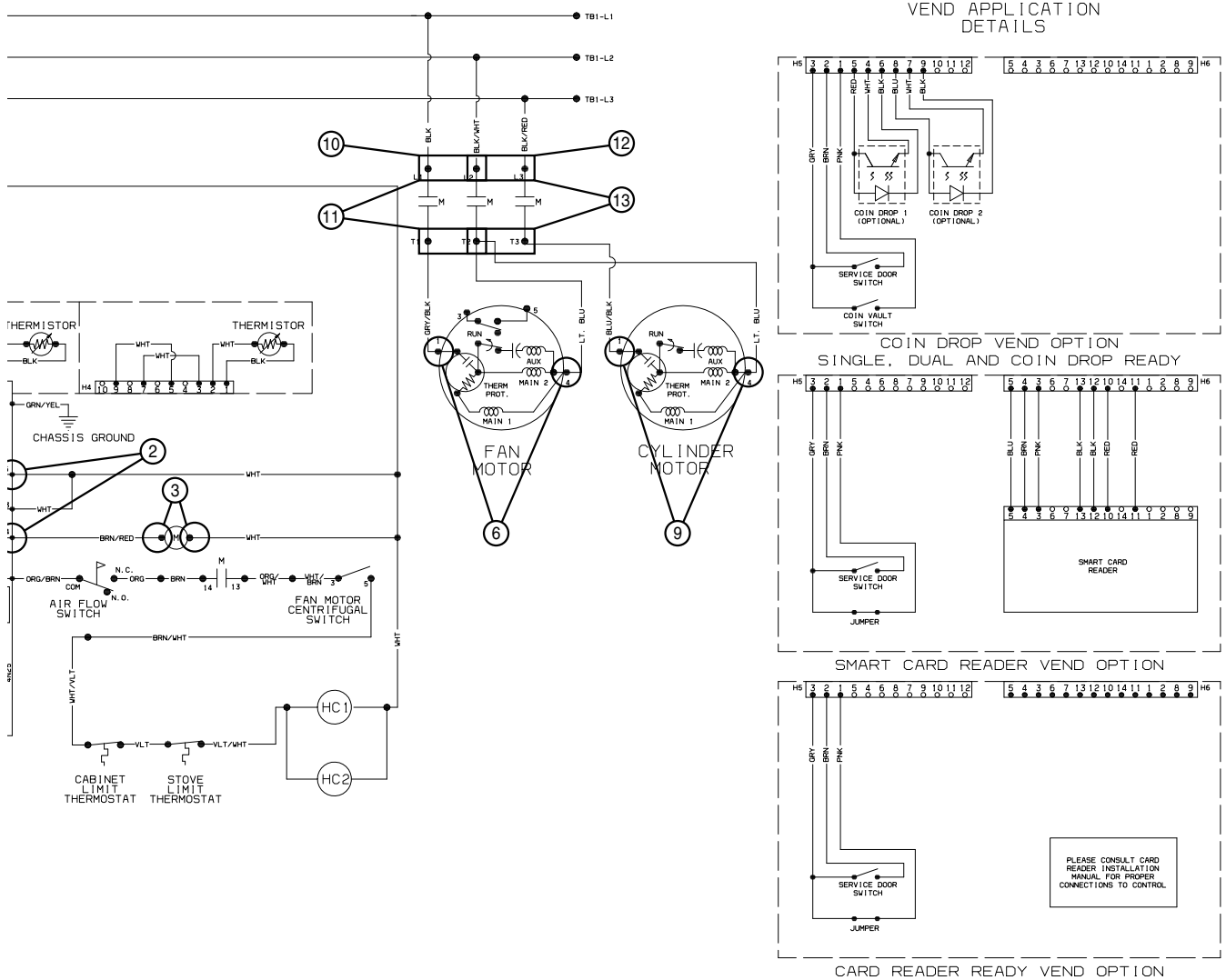


#### TRANSFORMER CONFIGURATION JUMPER DETAILS



## Motor Will Not Start (Sheet 2 of 2)

### 3 Phase Models

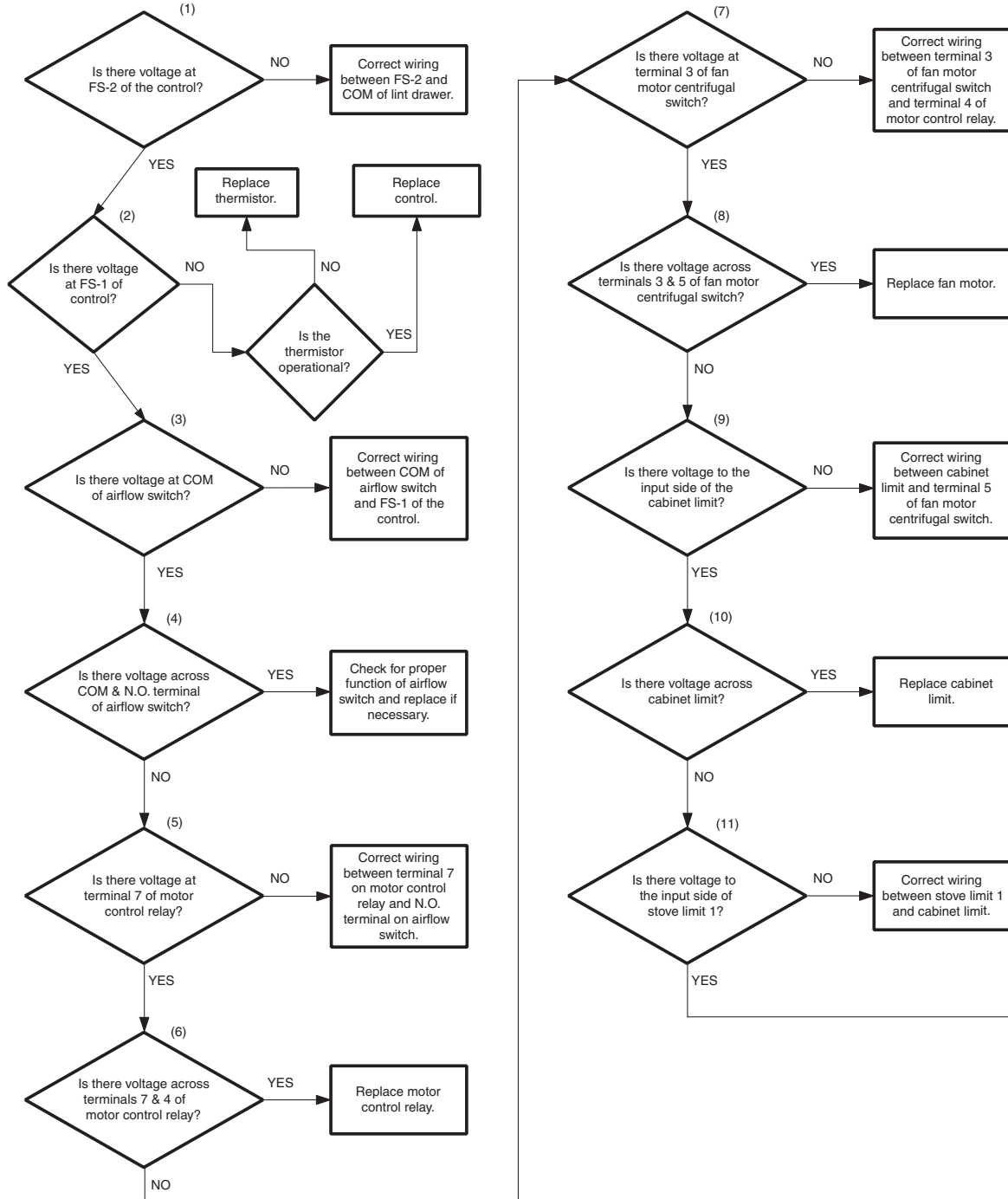


TMB2239S

## 30. Unit Will Not Heat – Gas

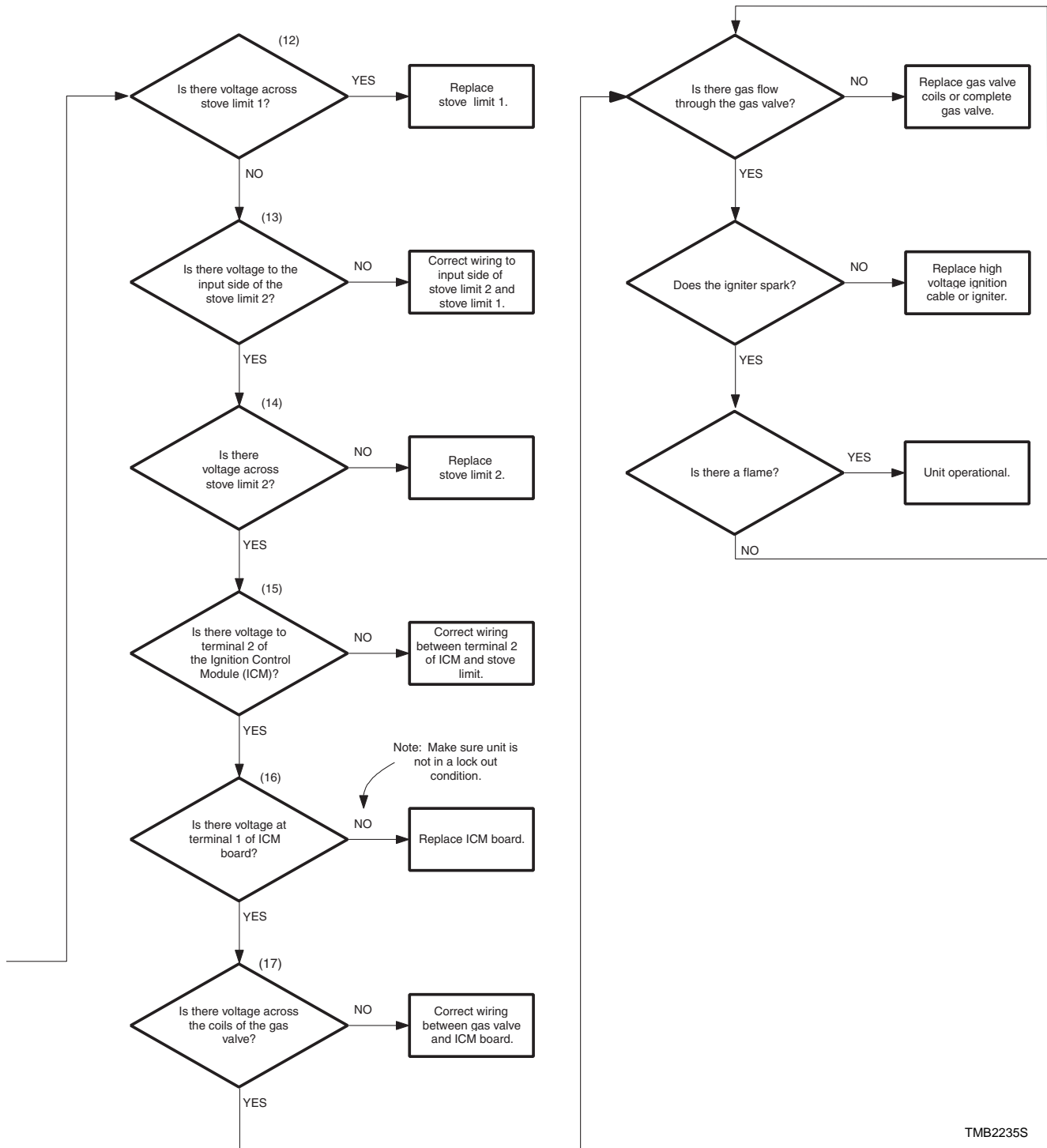
Note: Tests are conducted with unit running and calling for heat.

All voltage checks are referenced to transformer neutral.





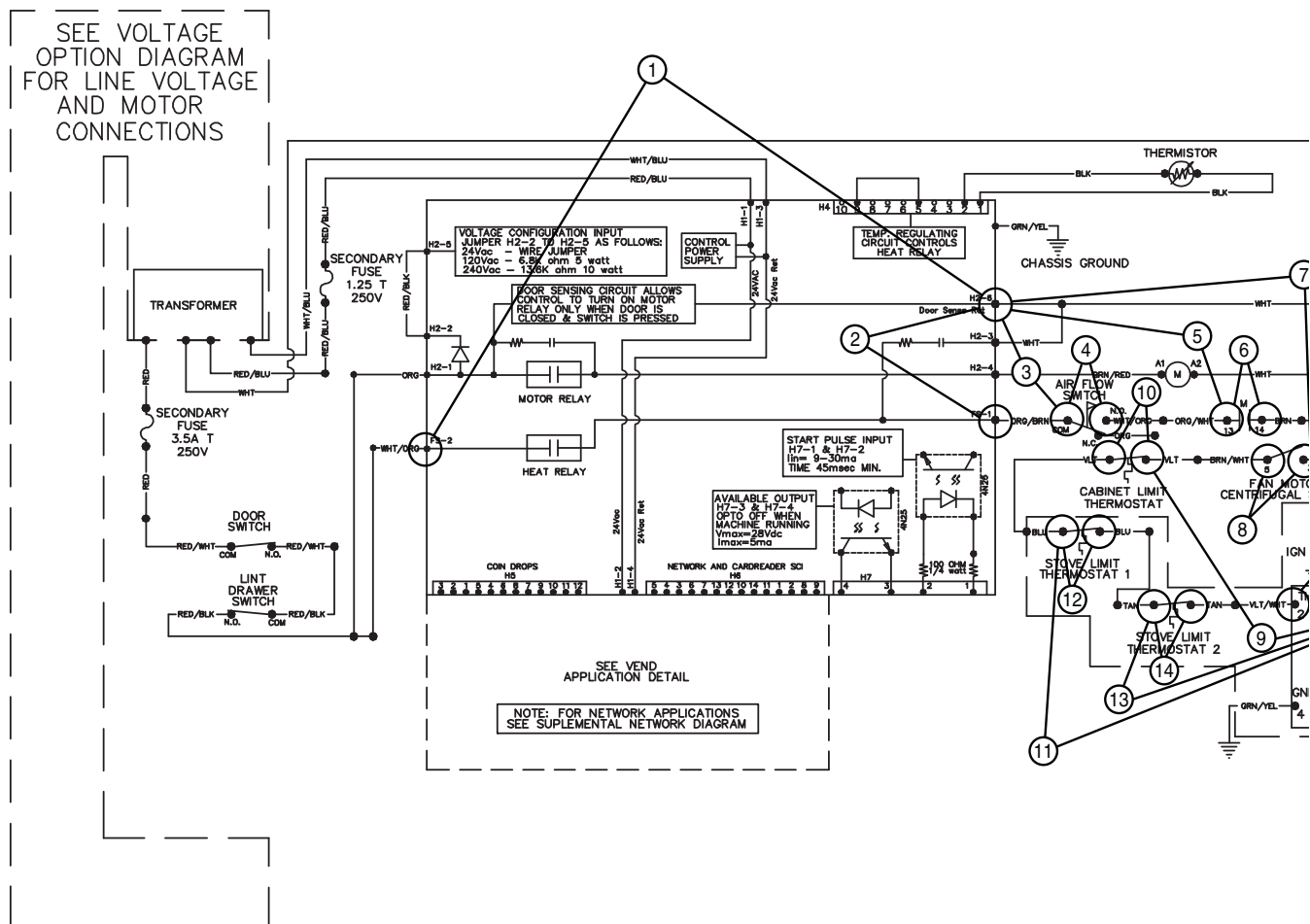
# 30. Unit Will Not Heat – Gas (continued)



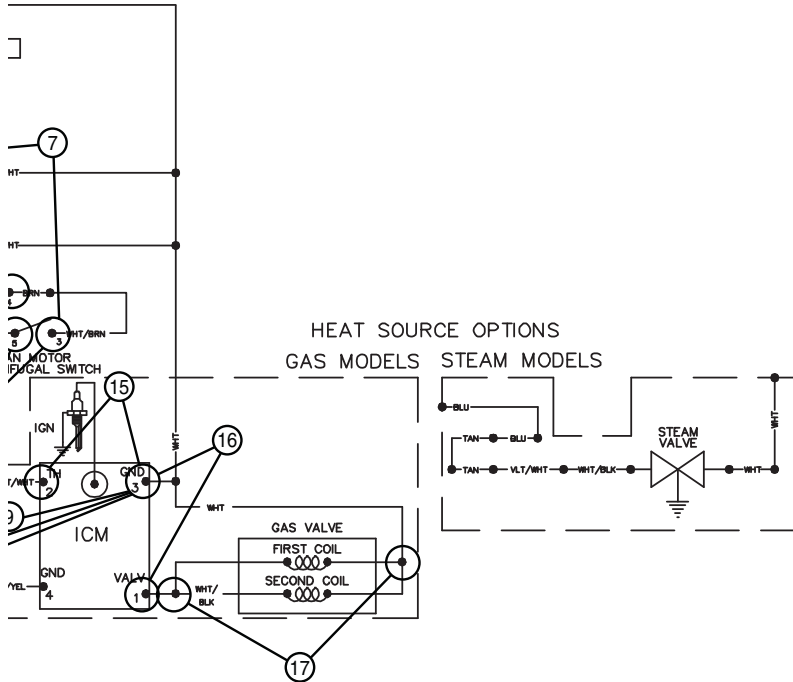
TMB2235S

Please see following 2 pages for wiring diagram information.

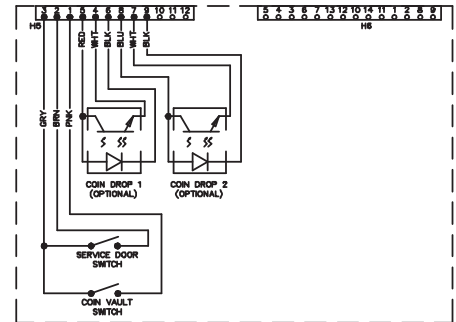
# Unit Will Not Heat – Gas (Sheet 1 of 2)



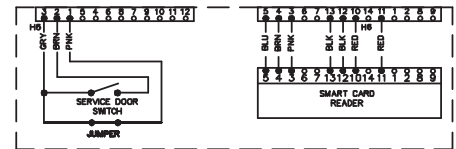
# Unit Will Not Heat – Gas (Sheet 2 of 2)



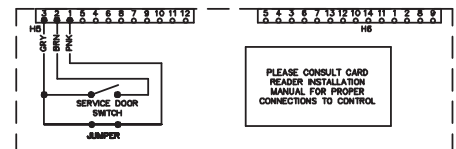
## VEND APPLICATION DETAILS



COIN DROP VEND OPTION  
SINGLE, DUAL AND COIN DROP READY



SMART CARD READER VEND OPTION



CARD READER READY VEND OPTION

TMB2240S

# Section 7

## Hybrid Timer Control Troubleshooting

### Models with QT, SD and SX Control Suffixes



#### WARNING

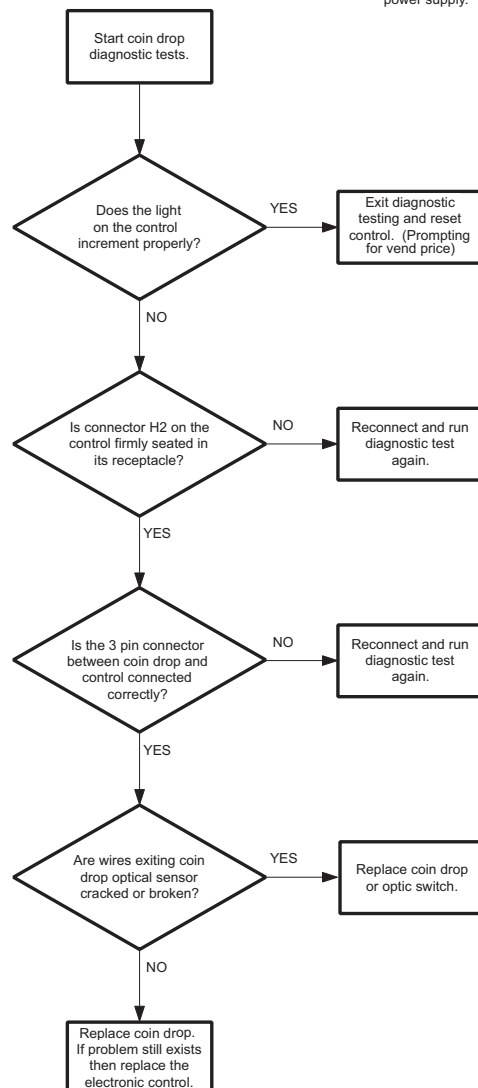
To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

W002

### 31. Coins Ignored When Entered

Gas and electric heat.  
Single and three phase  
power supply.



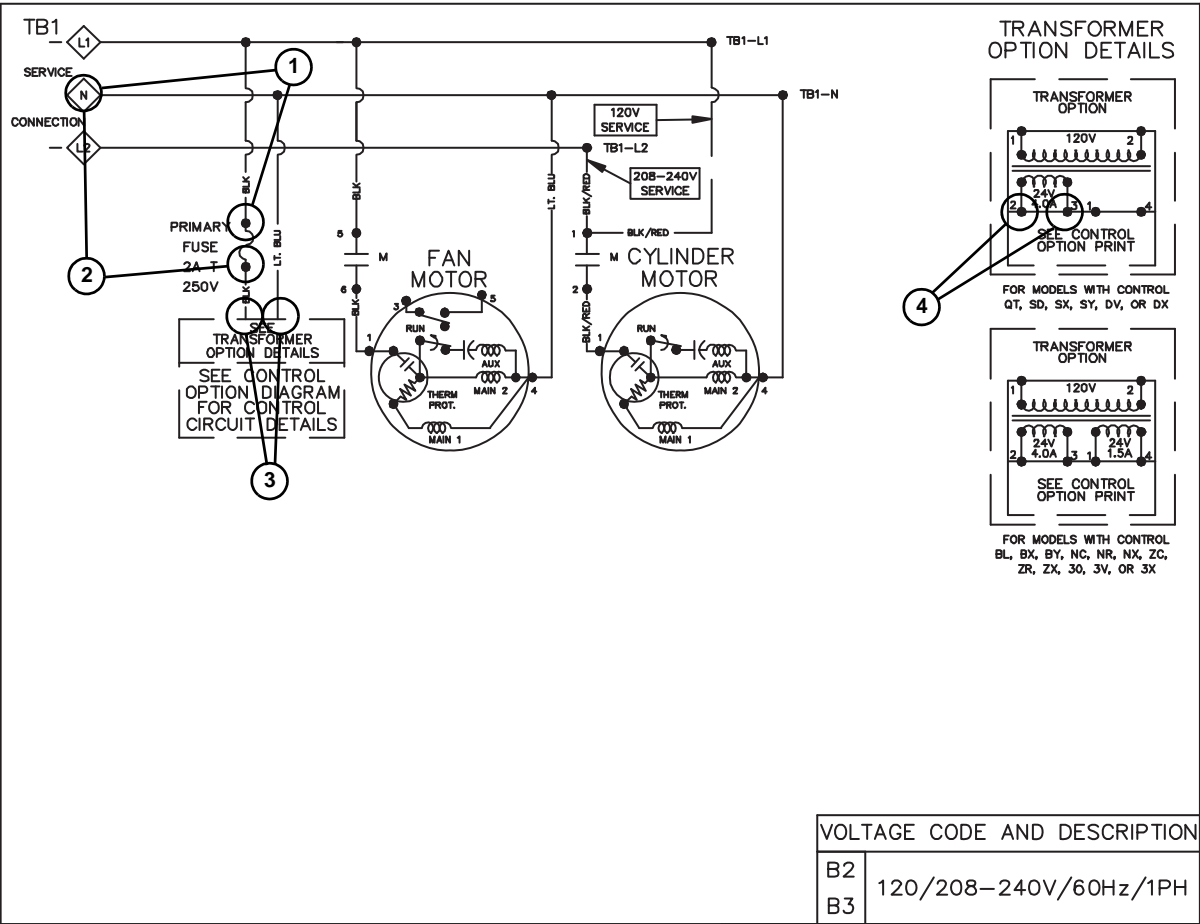
TMB2051S

# 32. Control Has No Display – OPL Models



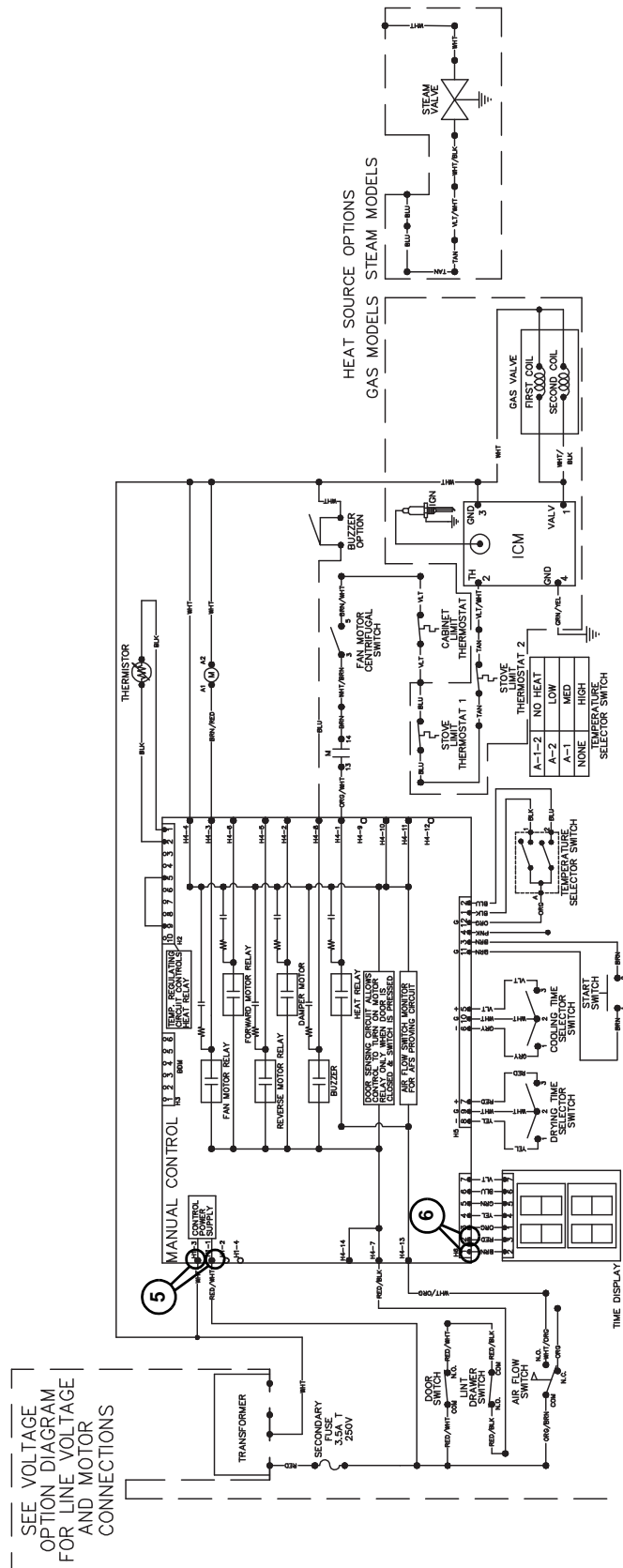
TMB2000S

Control Has No Display – OPL Models (Sheet 1 of 2)



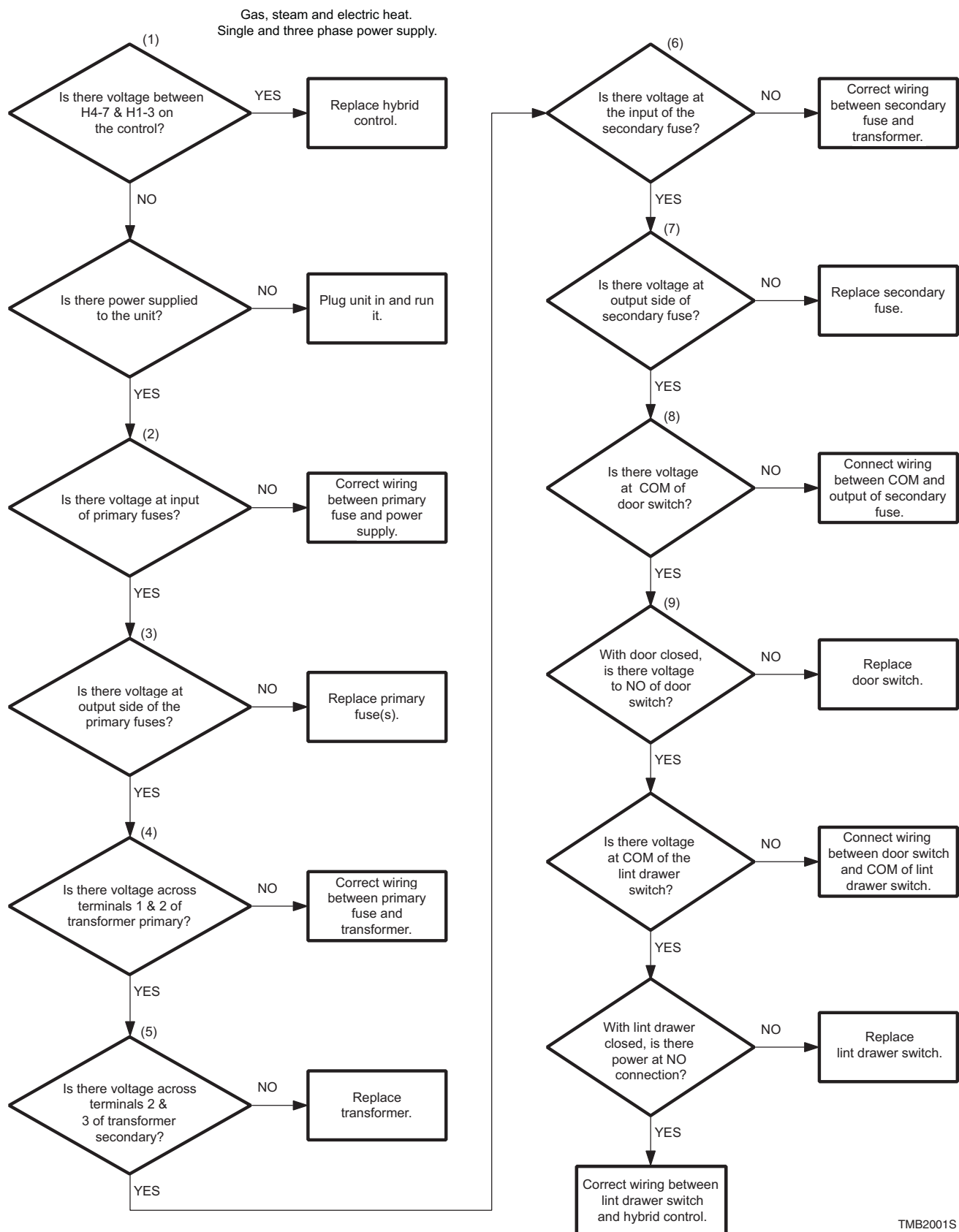
TMB2019S

## Control Has No Display – OPL Models (Sheet 2 of 2)



TMB1970S

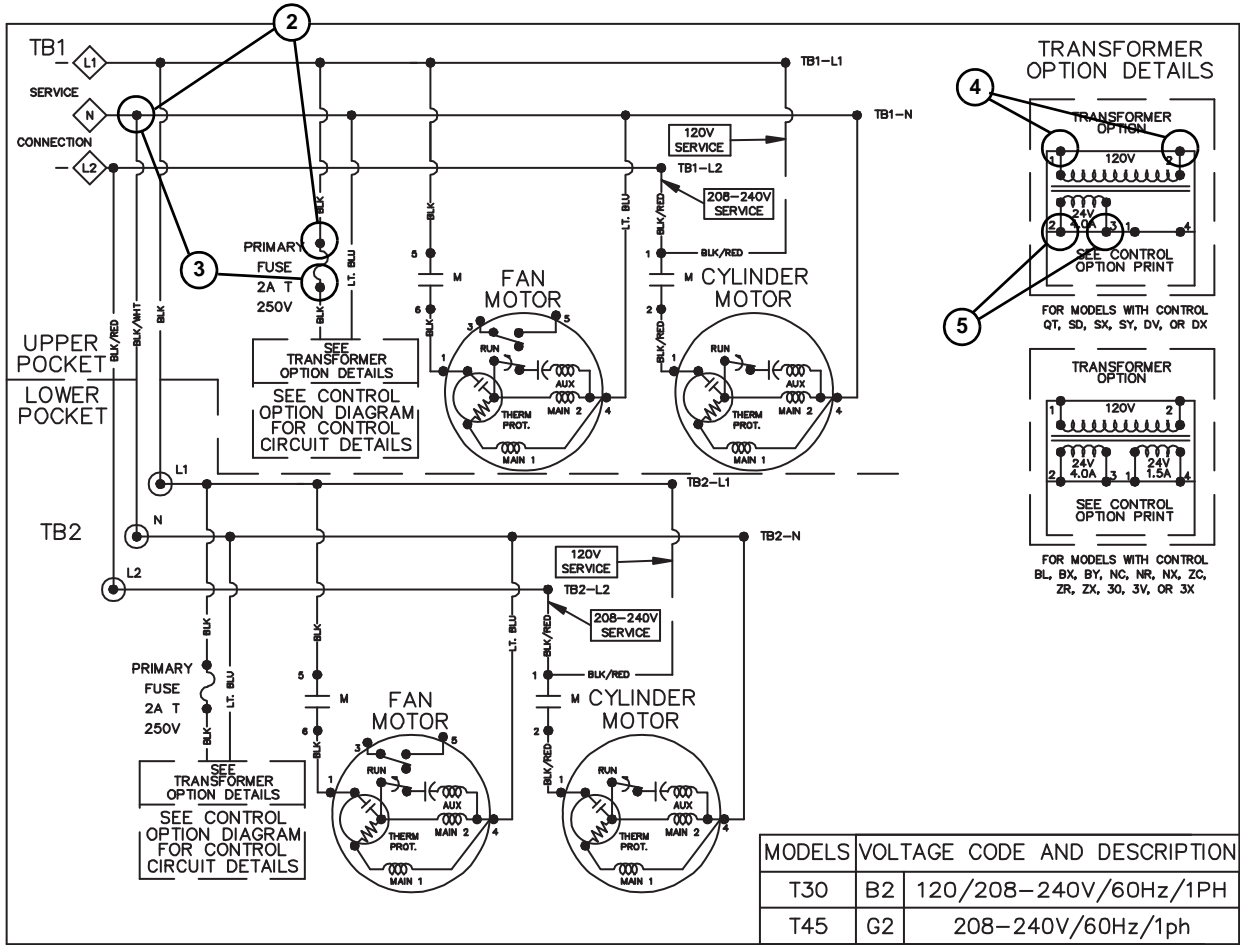
### 33. Display Flashes “dr” With Door Closed – OPL Models



TMB2001S

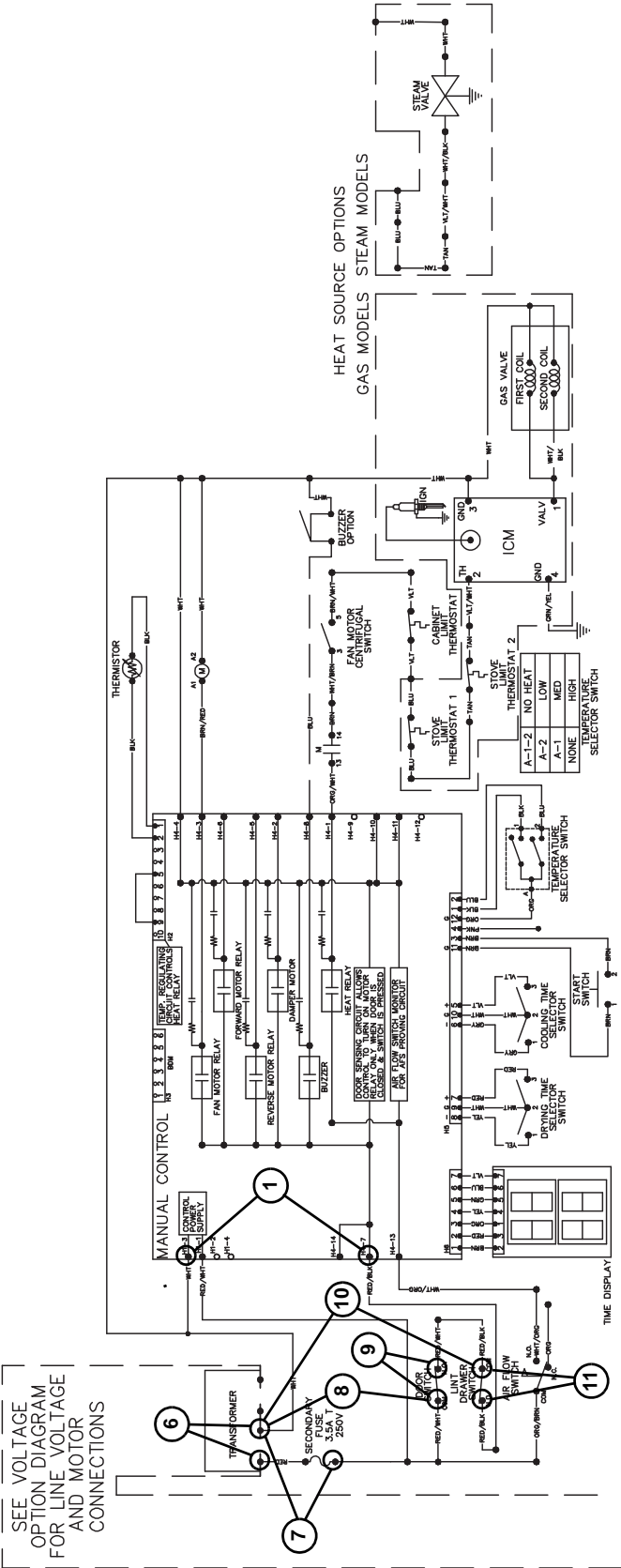


Display Flashes “dr” With Door Closed – OPL Models (Sheet 1 of 2)



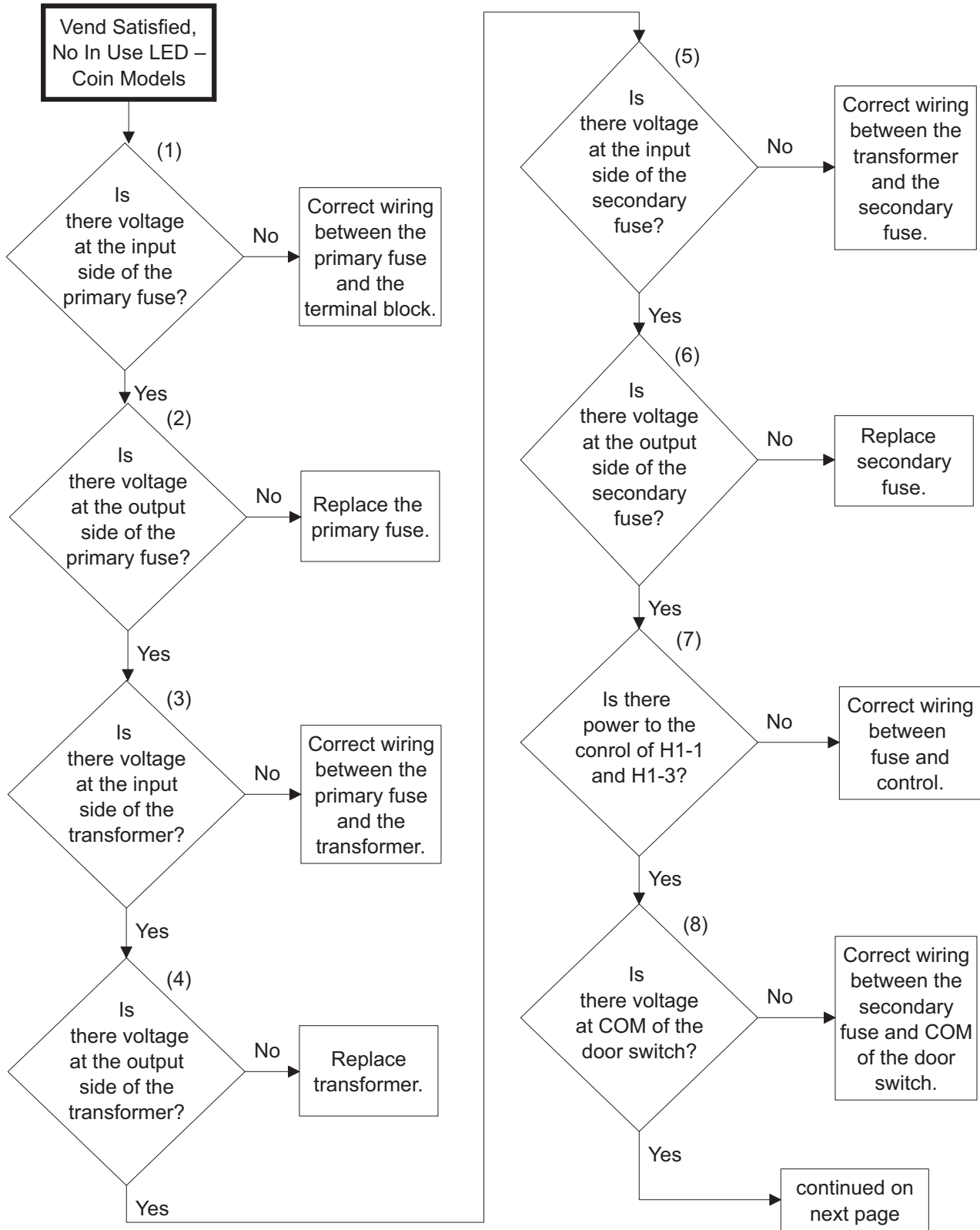
TMB1971S

Display Flashes “dr” With Door Closed – OPL Models (Sheet 2 of 2)

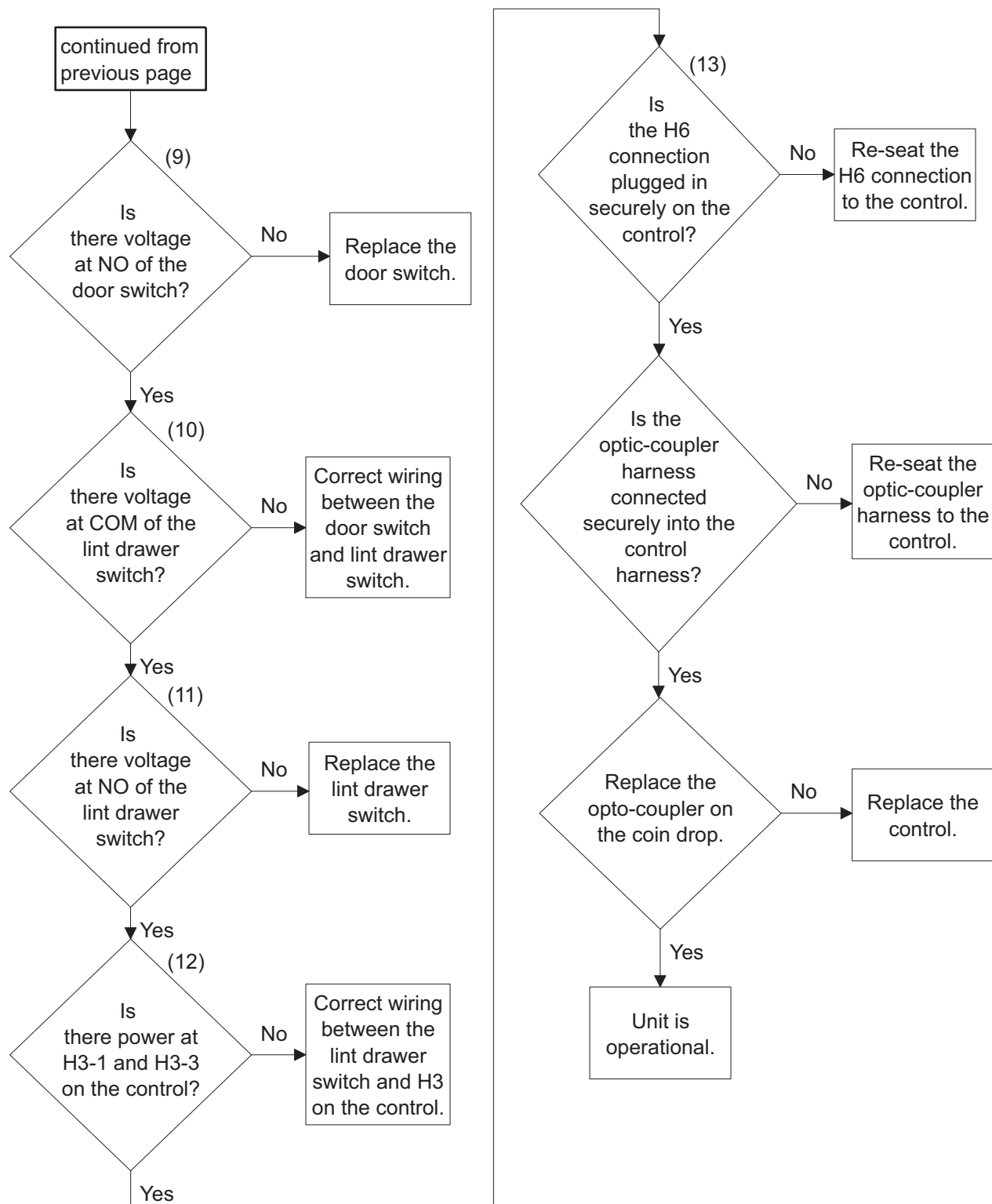


TMB1970S

### 34. Vend Satisfied, No In Use LED – Coin Models

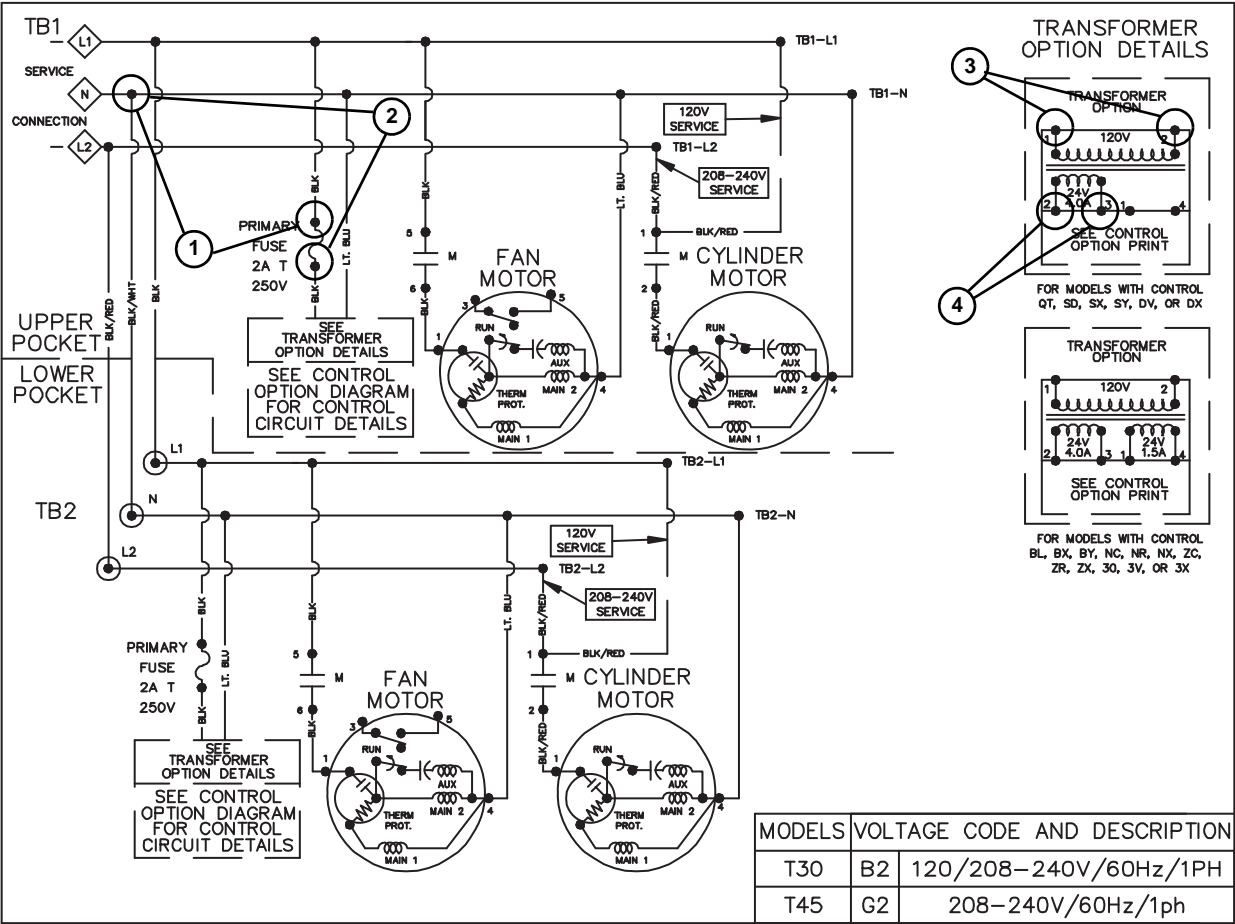


TMB2022S-a

**34. Vend Satisfied, No In Use LED – Coin Models (continued)**

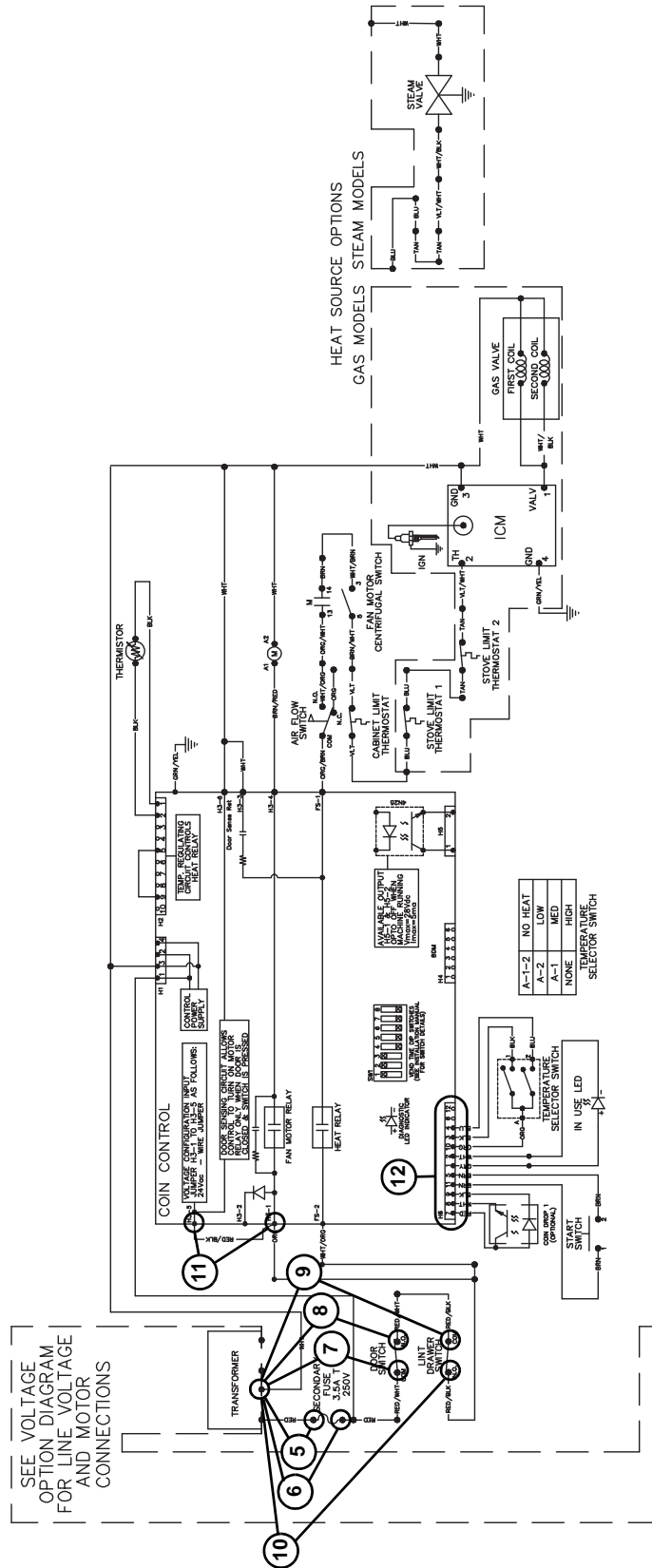
TMB2022S-b

Vend Satisfied, No In Use LED – Coin Models (Sheet 1 of 2)



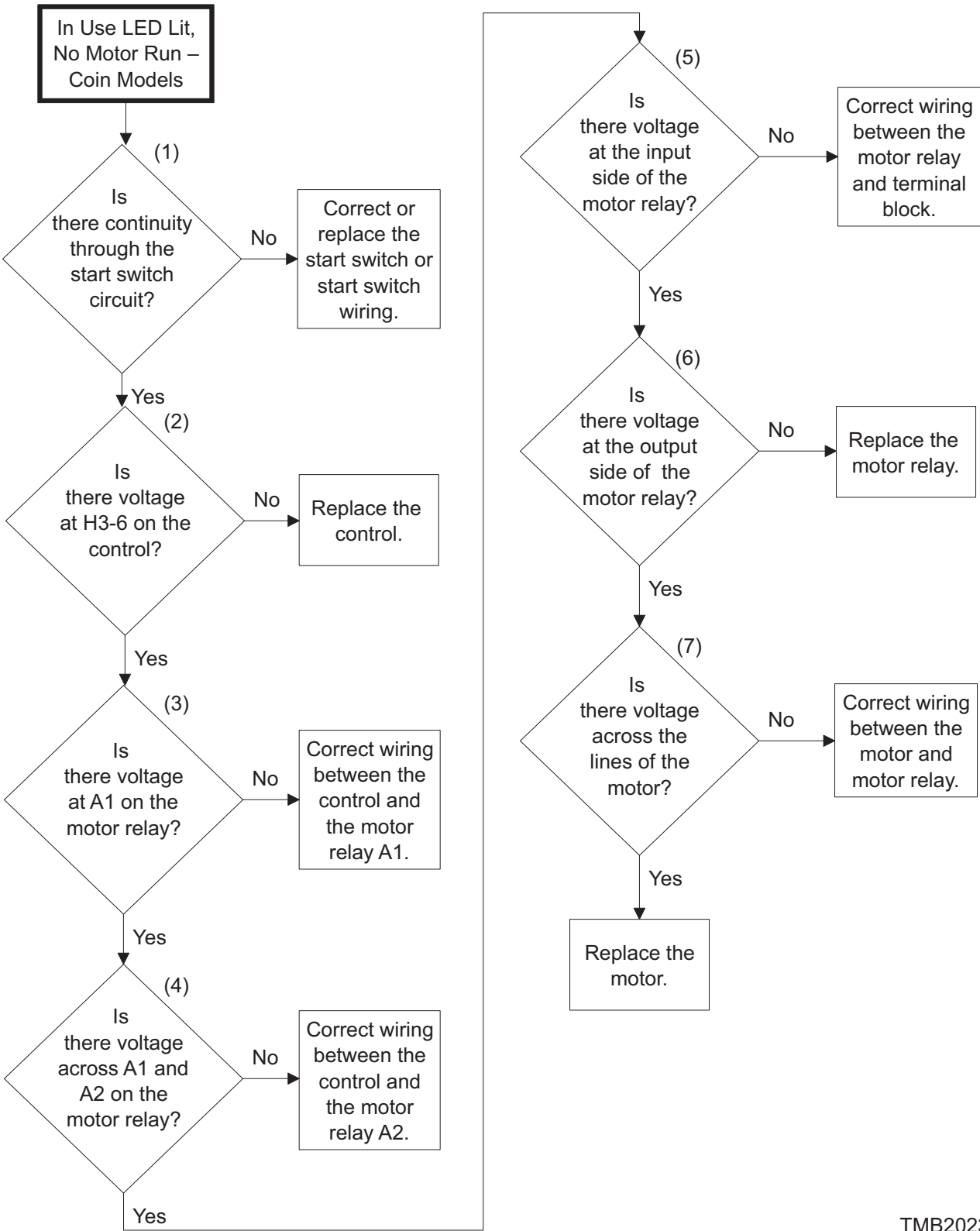
TMB1971S

# Vend Satisfied, No In Use LED – Coin Models (Sheet 2 of 2)



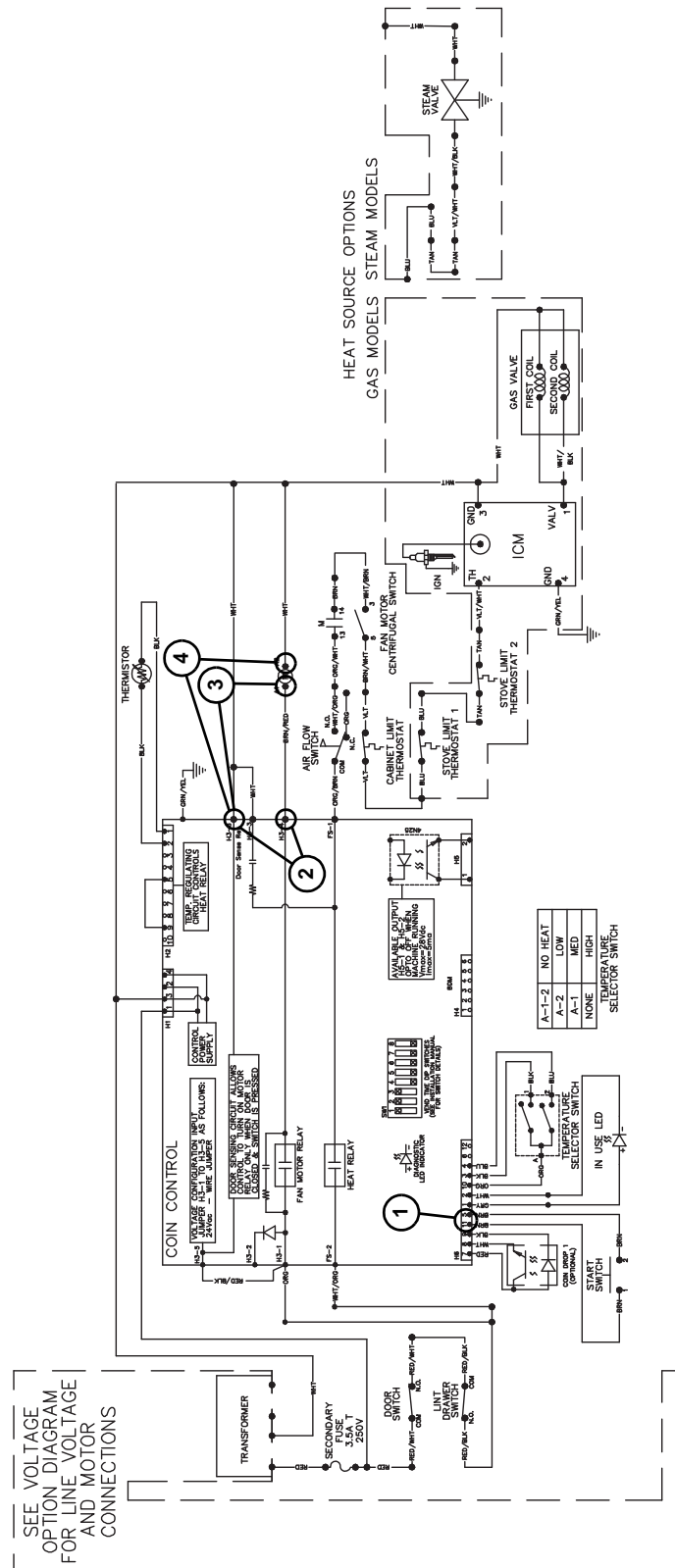
TMB1972S

35. In Use LED Lit, No Motor Run – Coin Models



TMB2023S

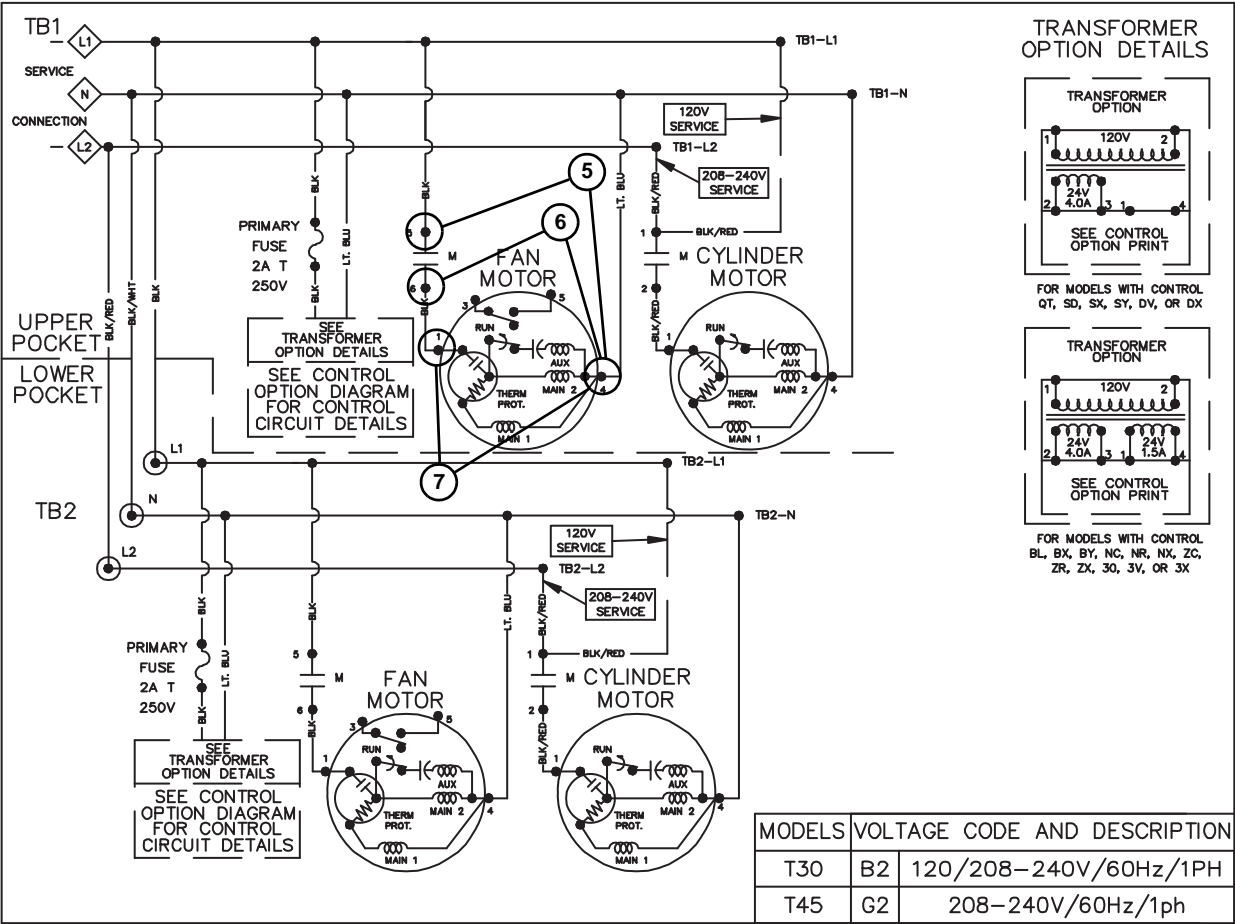
## In Use LED Lit, No Motor Run – Coin Models (Sheet 1 of 2)



TMB1972S

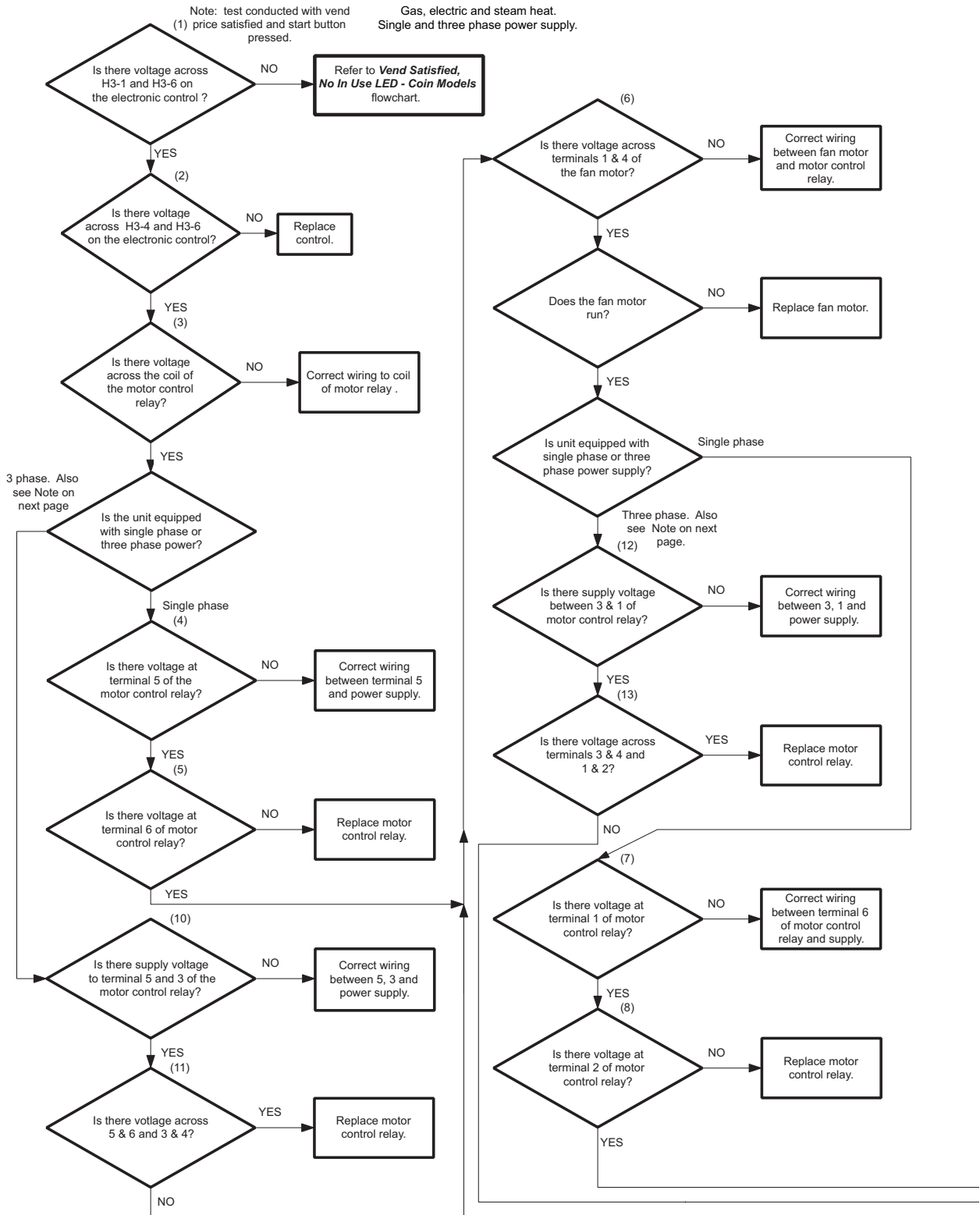


In Use LED Lit, No Motor Run – Coin Models (Sheet 2 of 2)

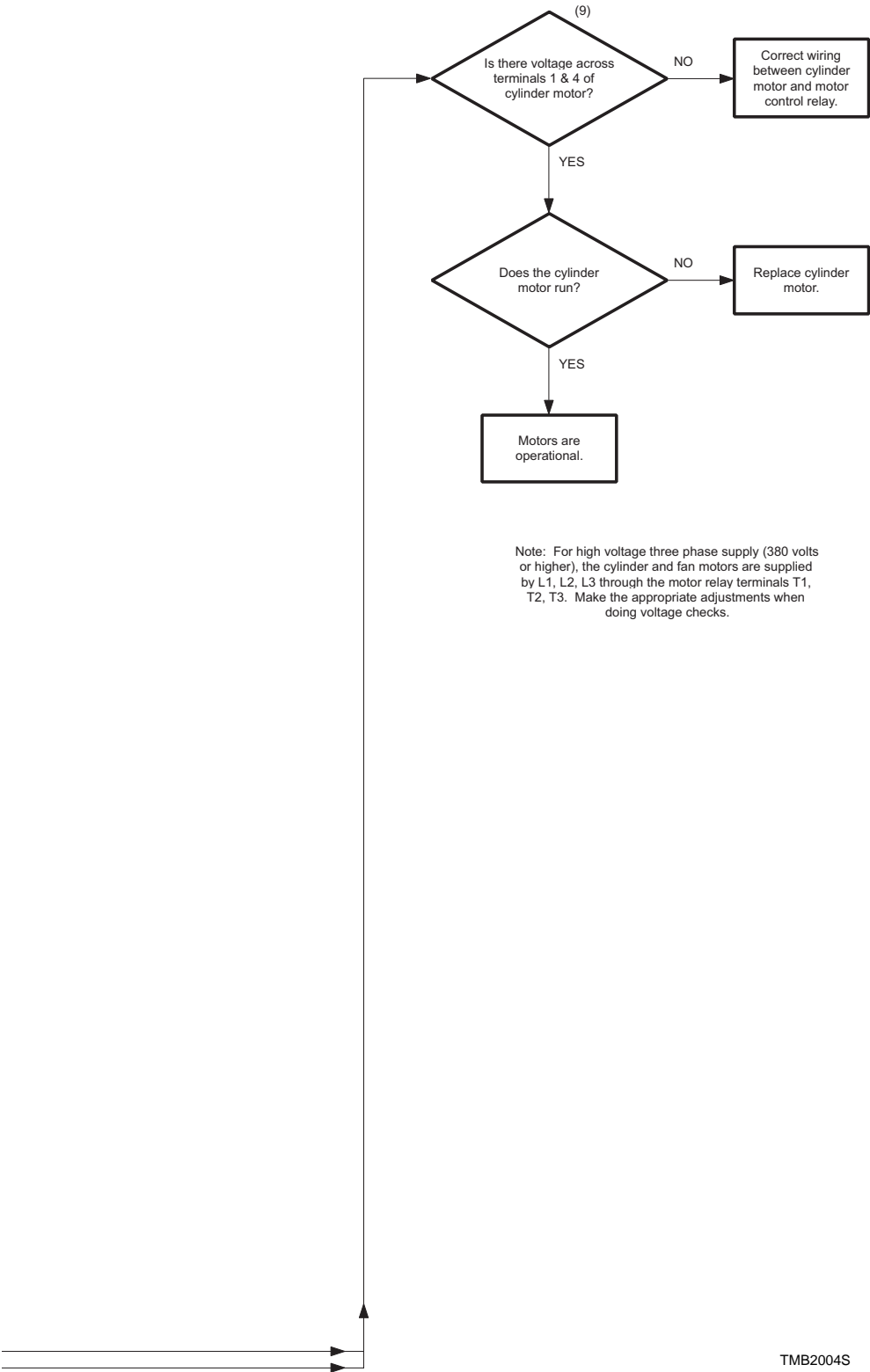


TMB1971S

# 36. Motor Will Not Start/Run – Coin Models

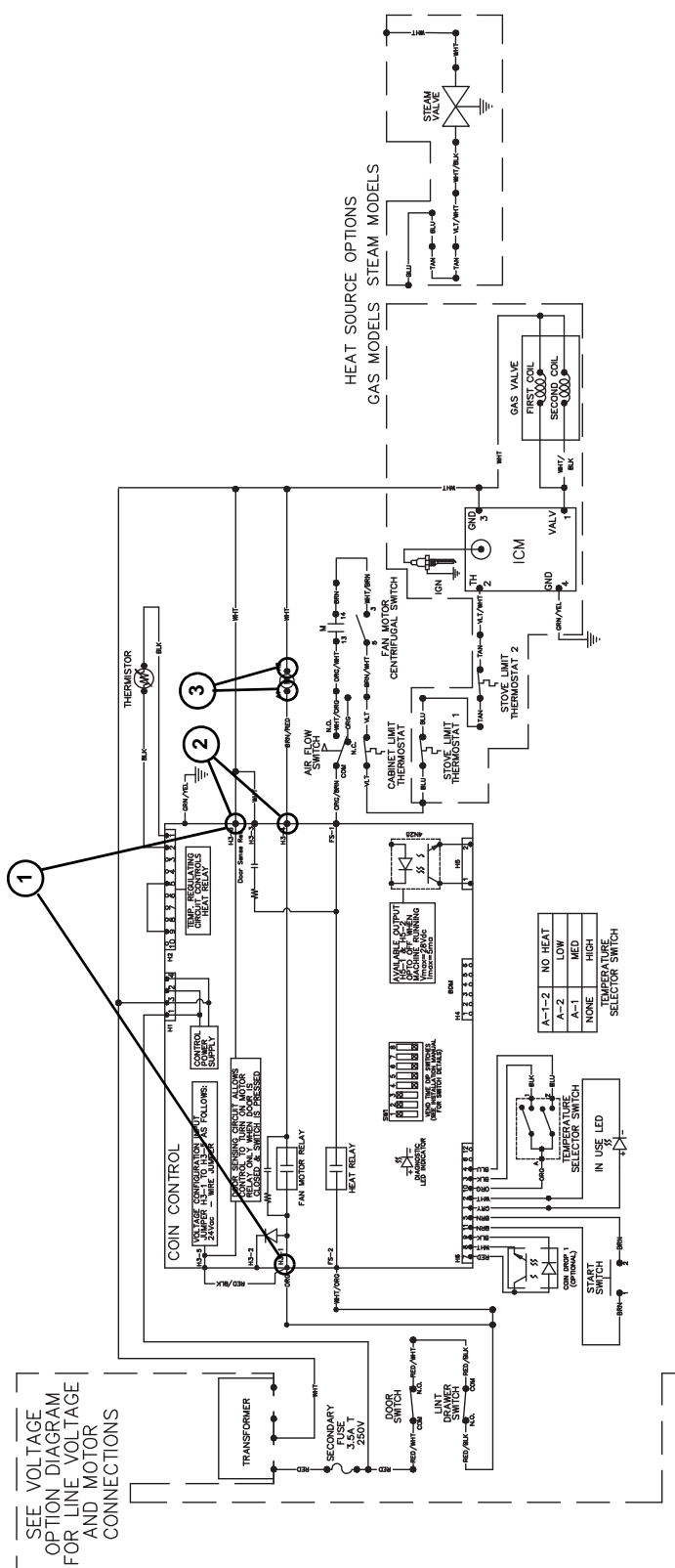


36. Motor Will Not Start/Run – Coin Models (continued)



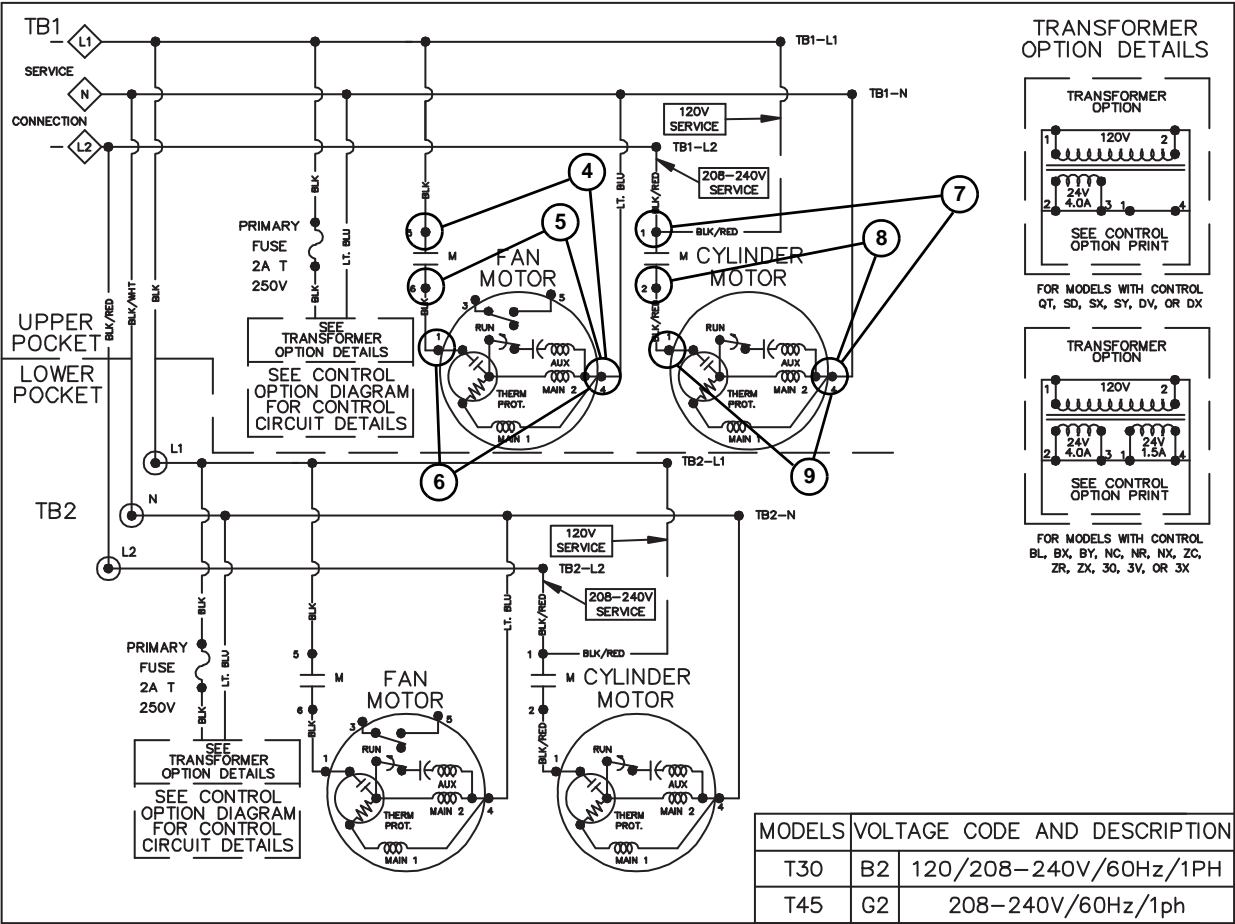
Please see following 2 pages for wiring diagram information.

## Motor Will Not Start/Run – Coin Models (Sheet 1 of 3)



TMB1972S

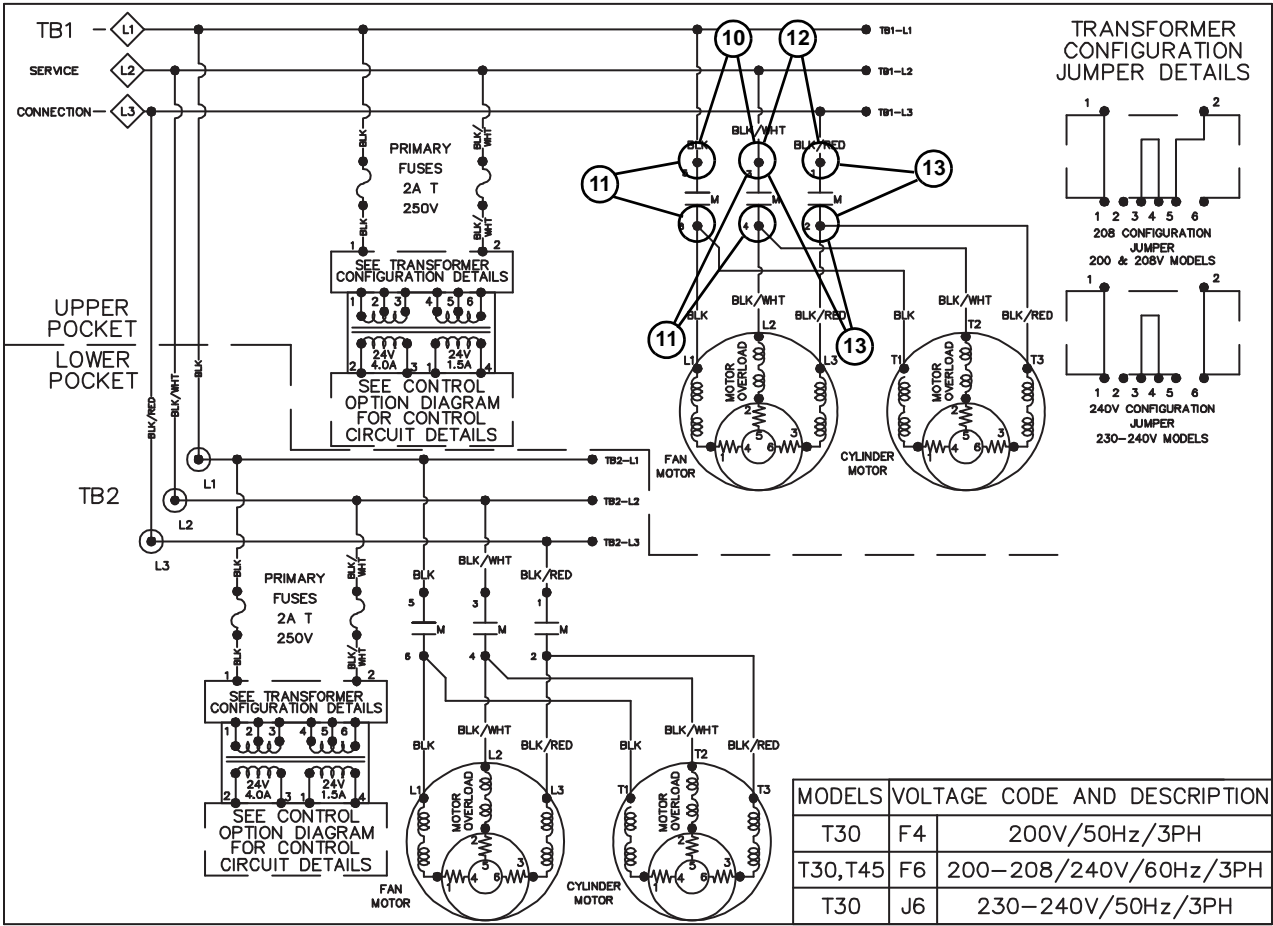
Motor Will Not Start/Run – Coin Models (Sheet 2 of 3)



TMB1971S

1 Phase

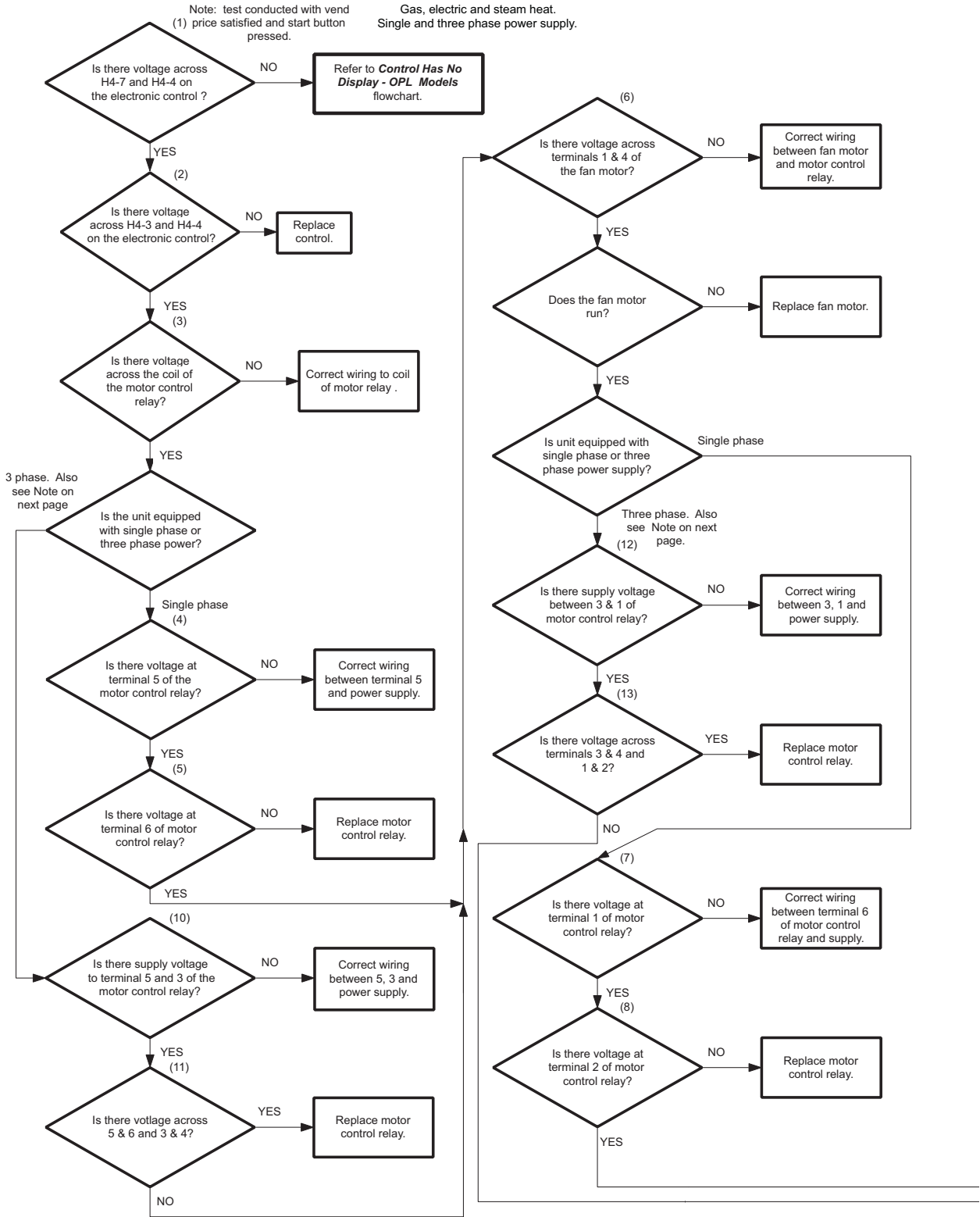
Motor Will Not Start/Run – Coin Models (Sheet 3 of 3)



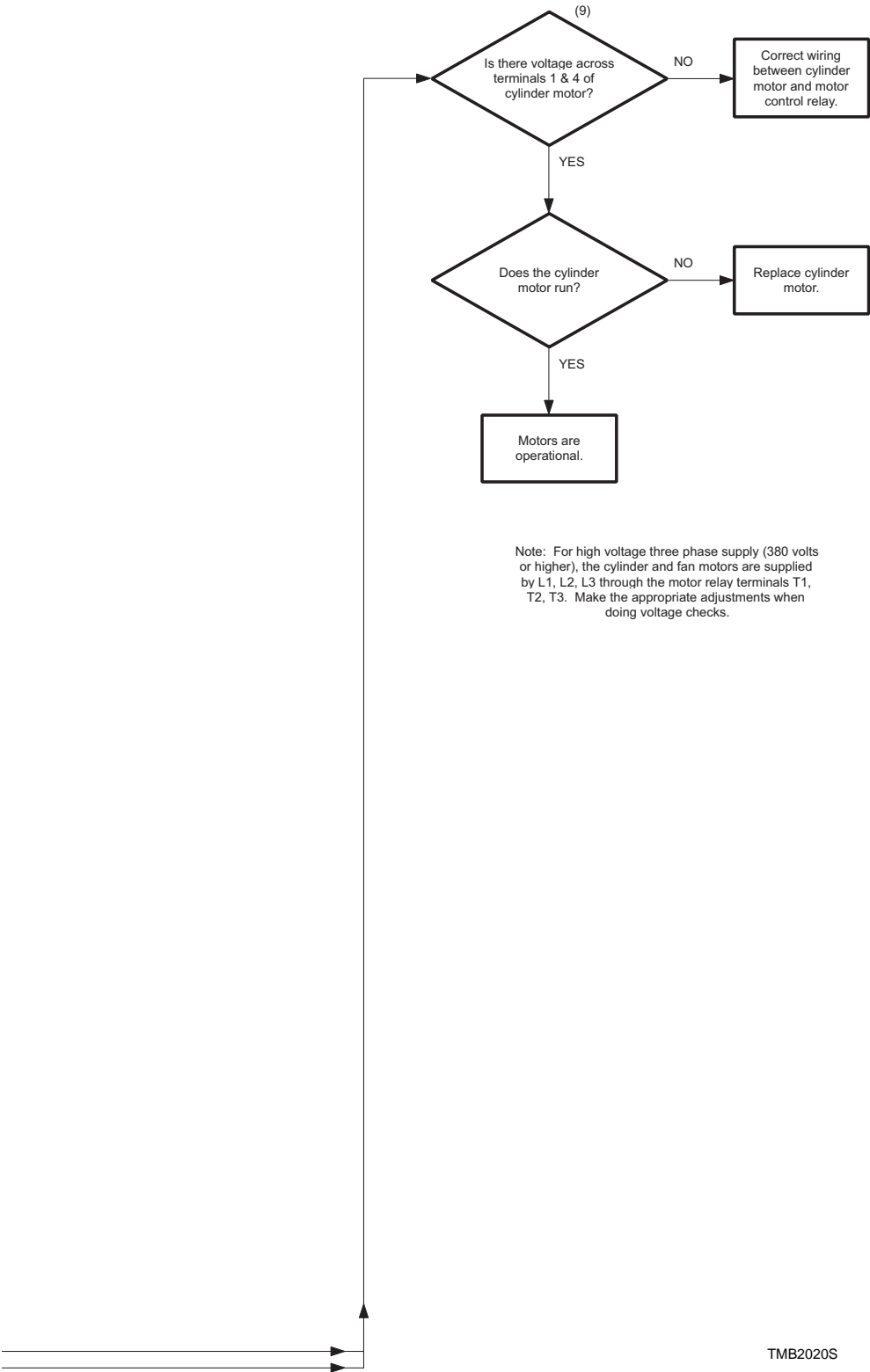
TMB1973S

3 Phase

# 37. Motor Will Not Start/Run – OPL Models



37. Motor Will Not Start/Run – OPL Models (continued)

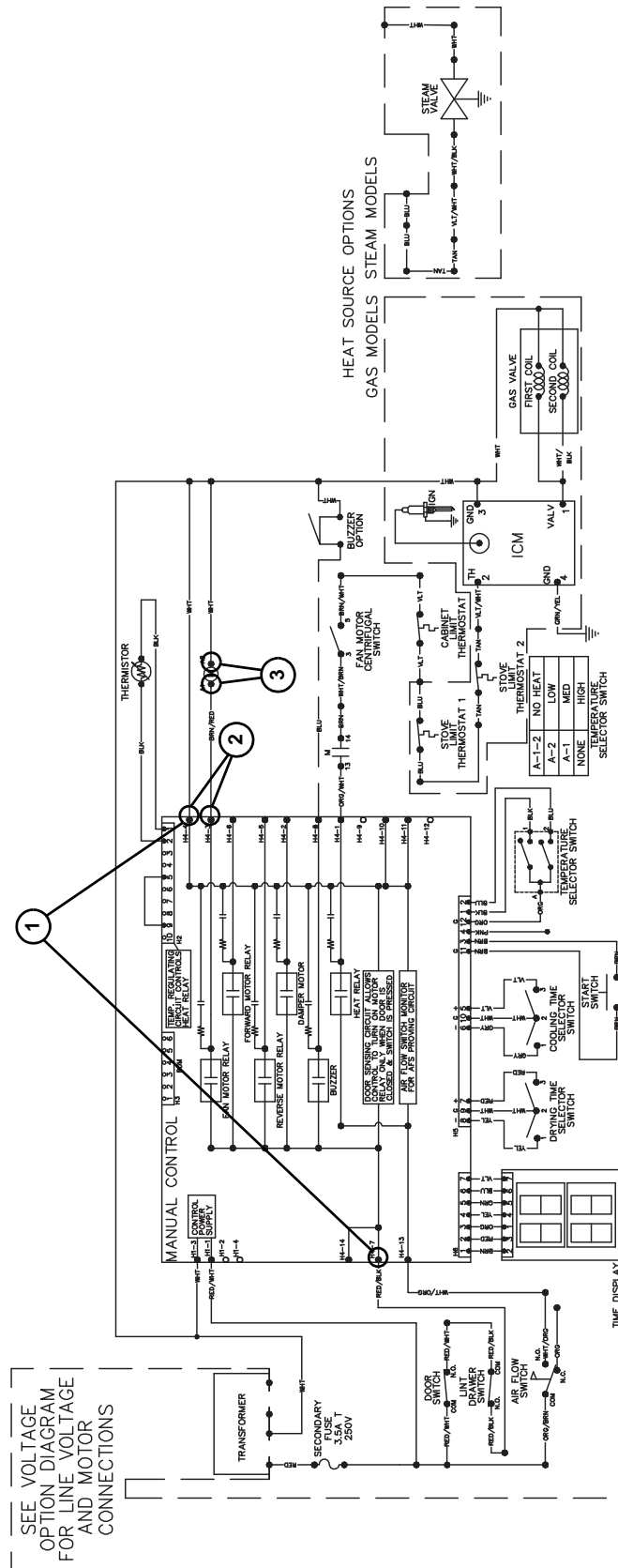


Please see following 2 pages for wiring diagram information.

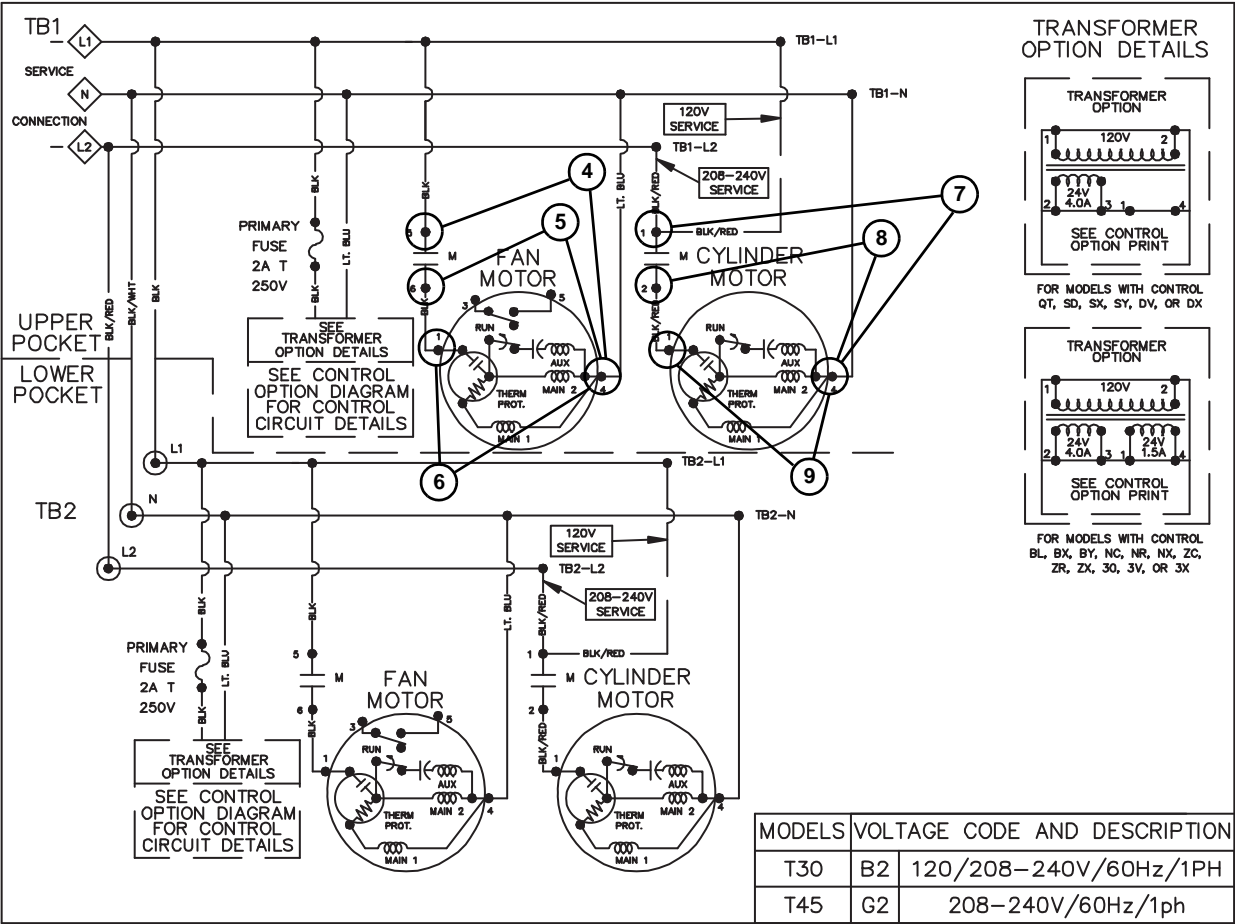


## Motor Will Not Start/Run – OPL Models (Sheet 1 of 3)

TMB1970S



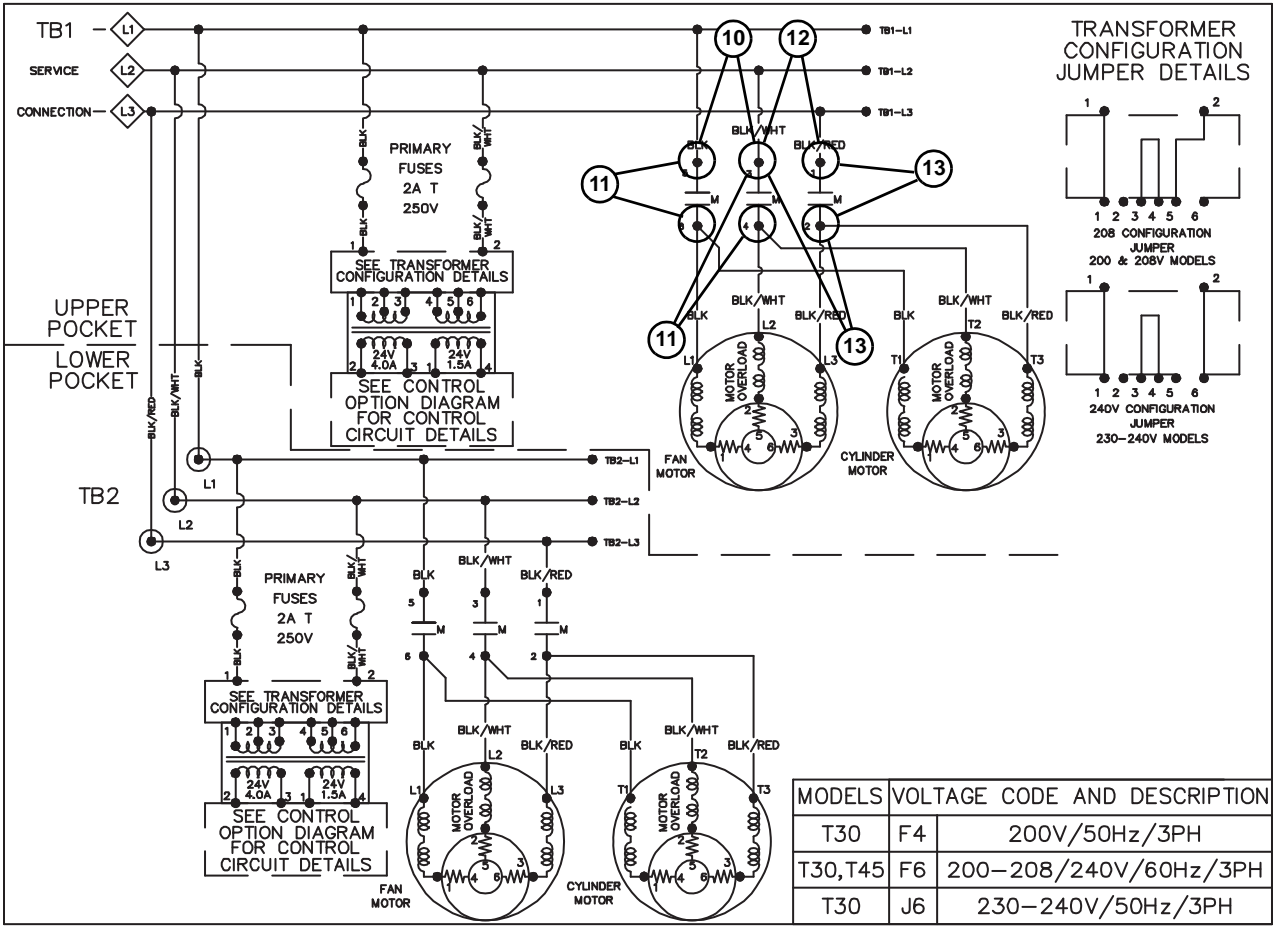
Motor Will Not Start/Run – OPL Models (Sheet 2 of 3)



TMB1971S

1 Phase

Motor Will Not Start/Run – OPL Models (Sheet 3 of 3)



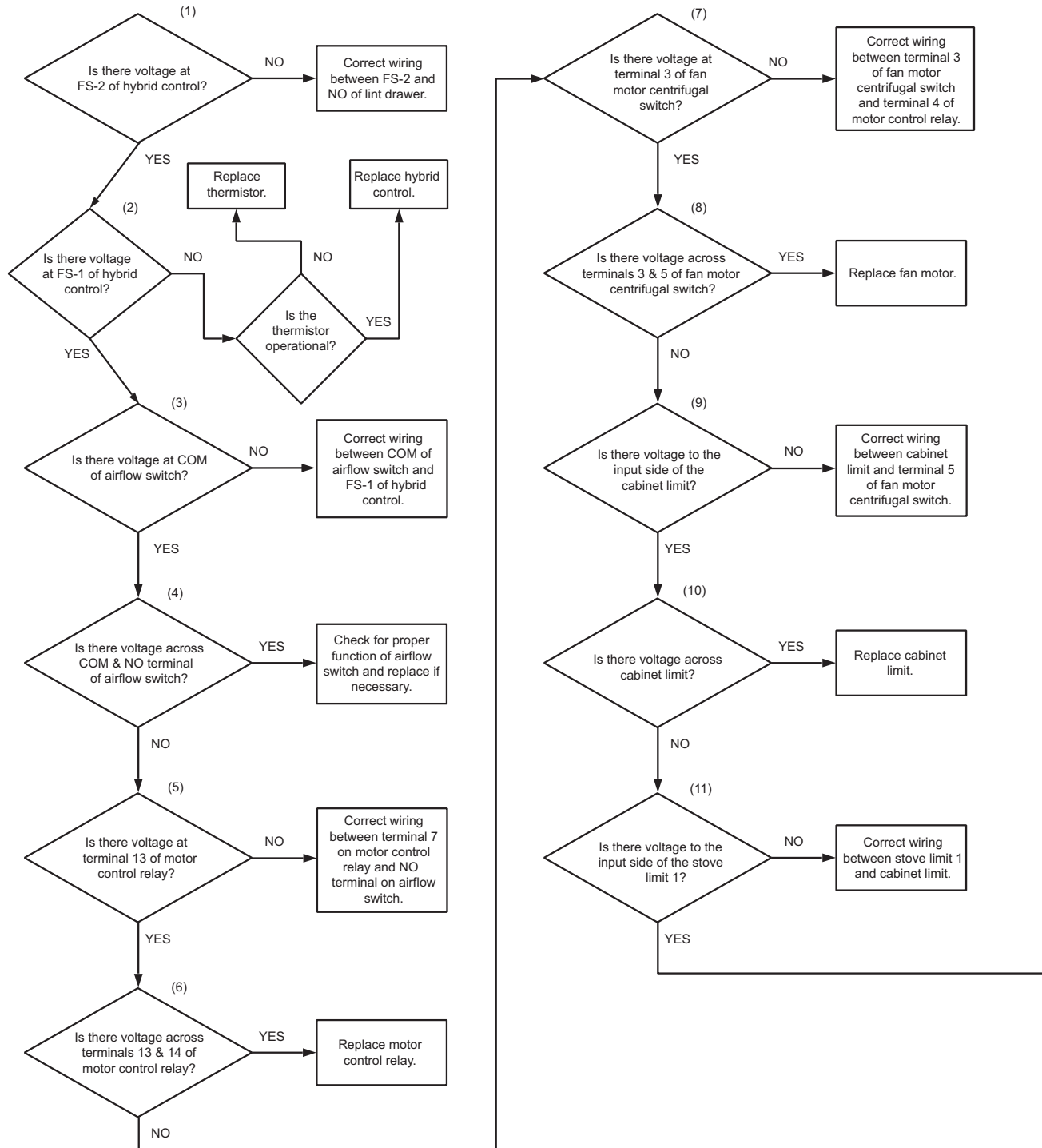
TMB1973S

3 Phase

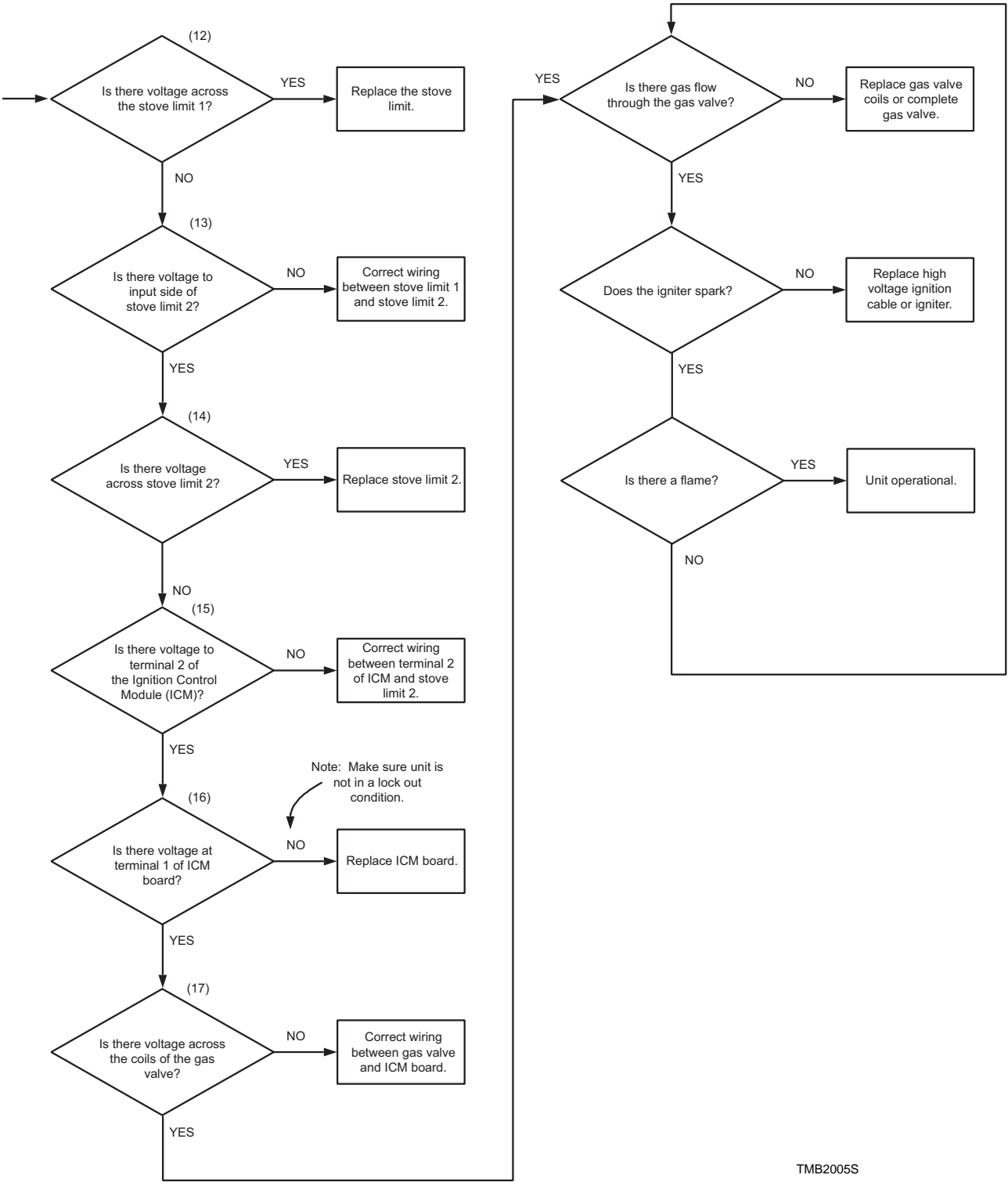
## 38. Unit Will Not Heat – Gas – Coin Models

Note: Tests are conducted with unit running and calling for heat.

All voltage checks are referenced to transformer neutral.



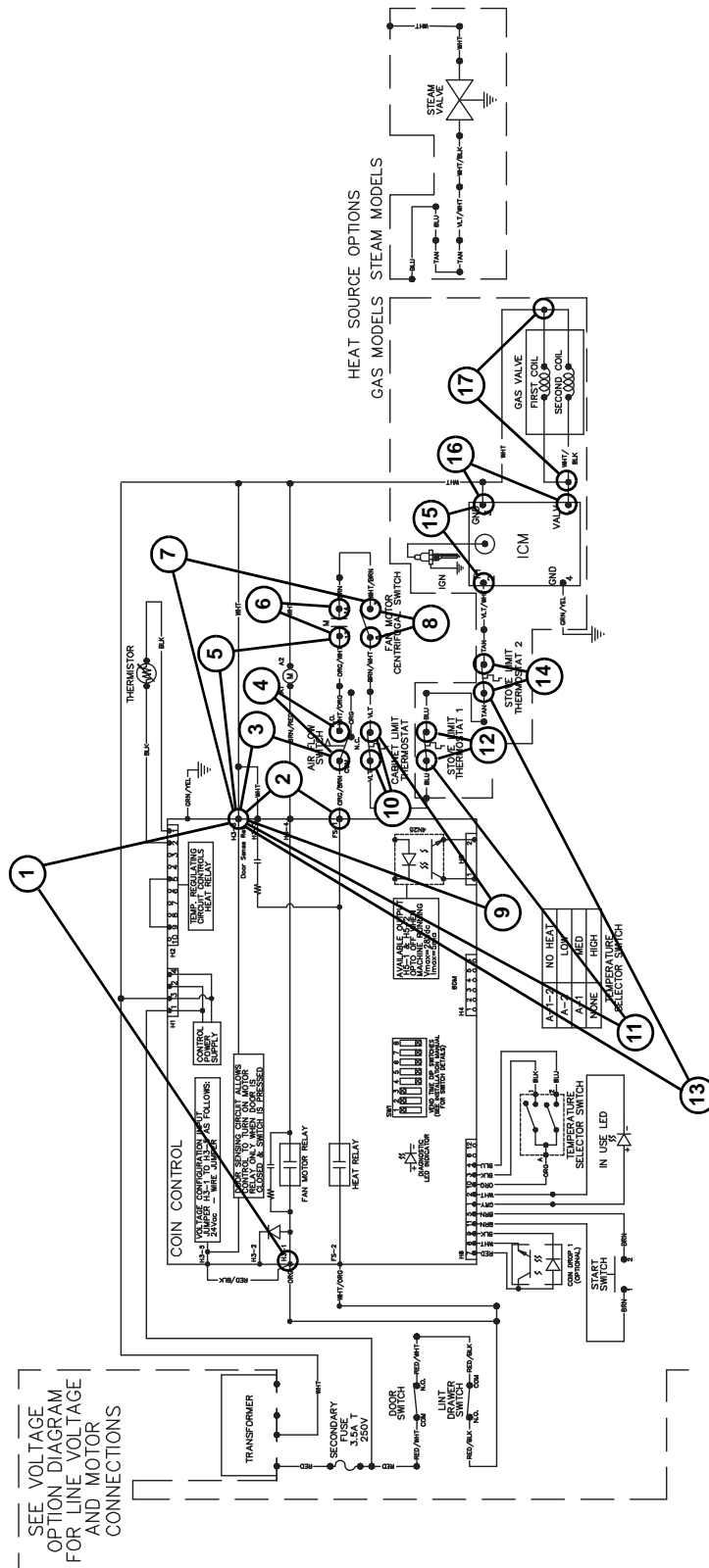
38. Unit Will Not Heat – Gas – Coin Models (continued)



TMB2005S

Please see following page for wiring diagram information.

# Unit Will Not Heat – Gas – Coin Models

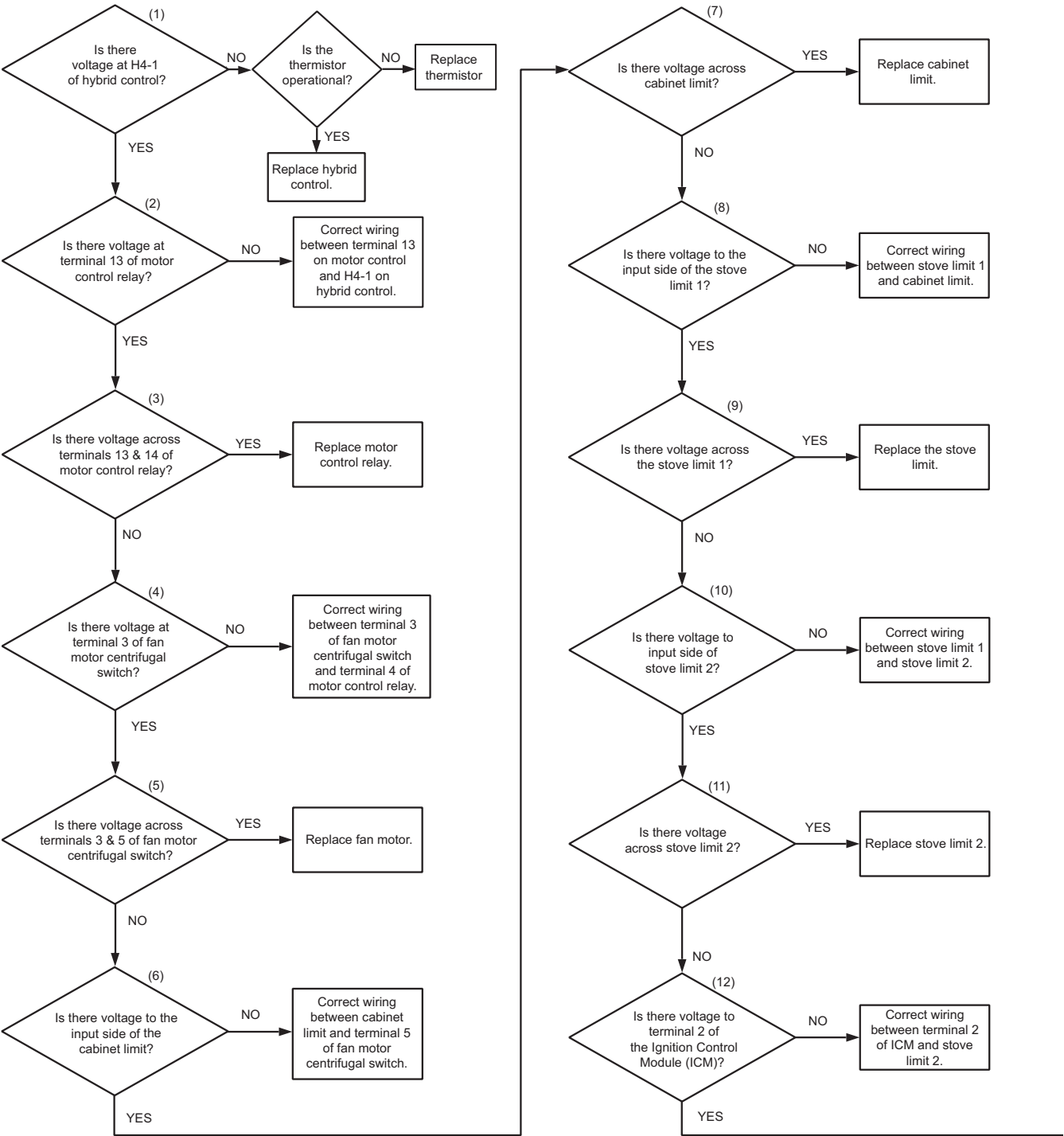


TMB1972S

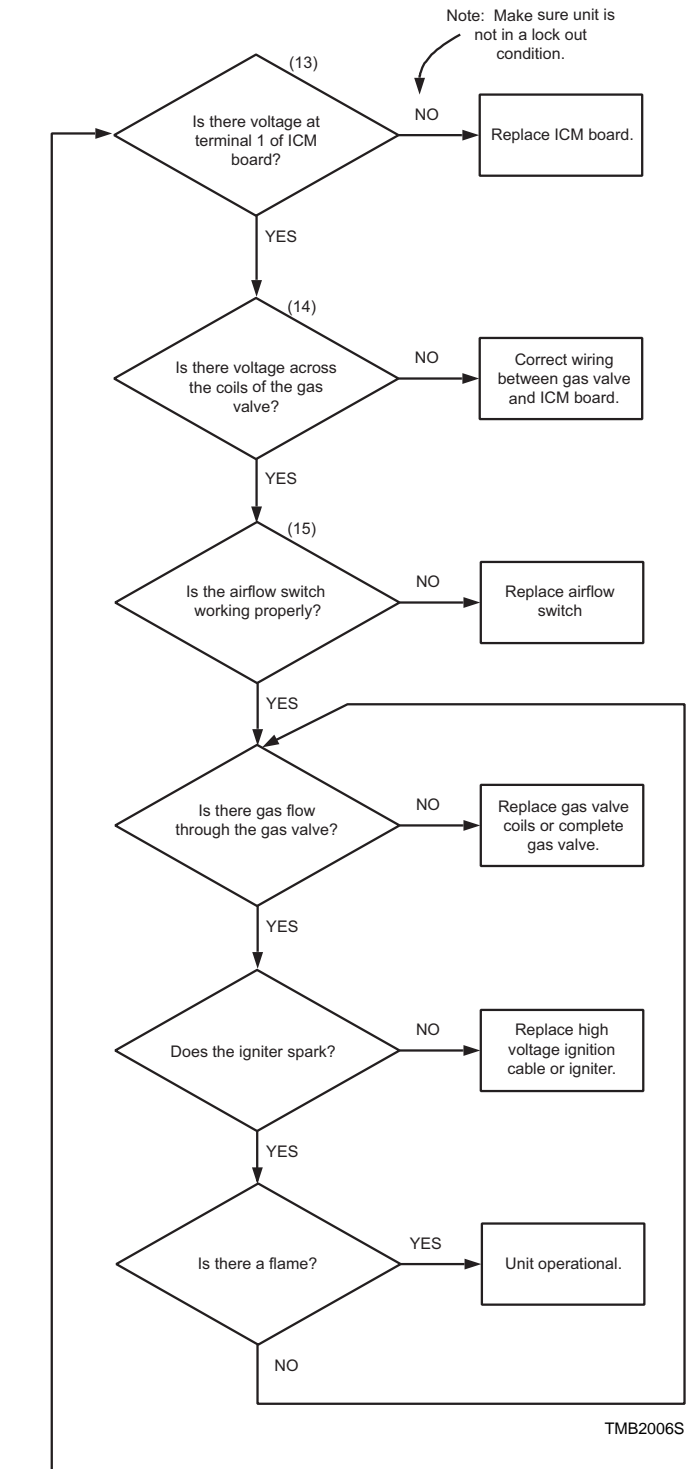
# 39. Unit Will Not Heat – Gas – OPL Models

Note: Tests are conducted with unit running and calling for heat.

All voltage checks are referenced to transformer neutral.



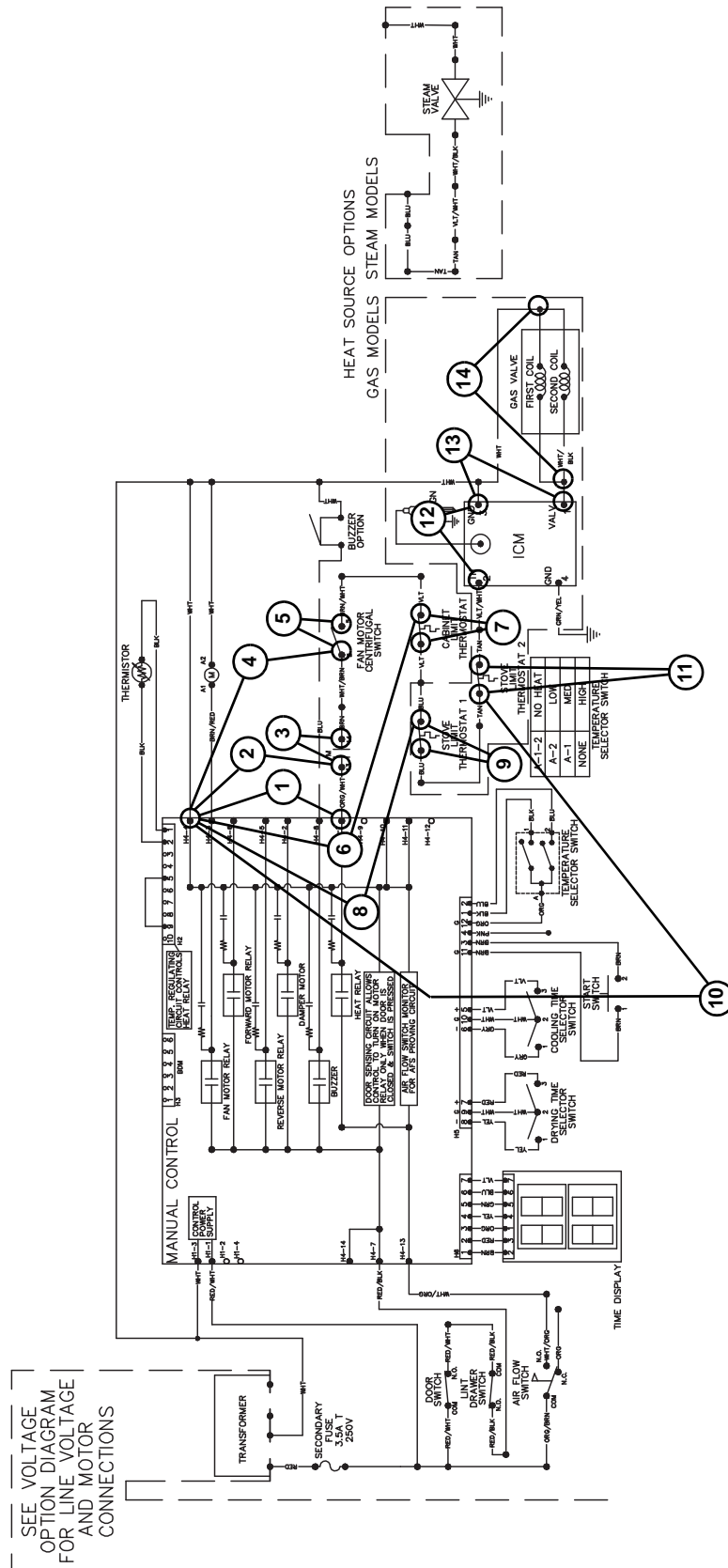
## 39. Unit Will Not Heat – Gas – OPL Models (continued)



Please see following page for wiring diagram information.



## Unit Will Not Heat – Gas – OPL Models

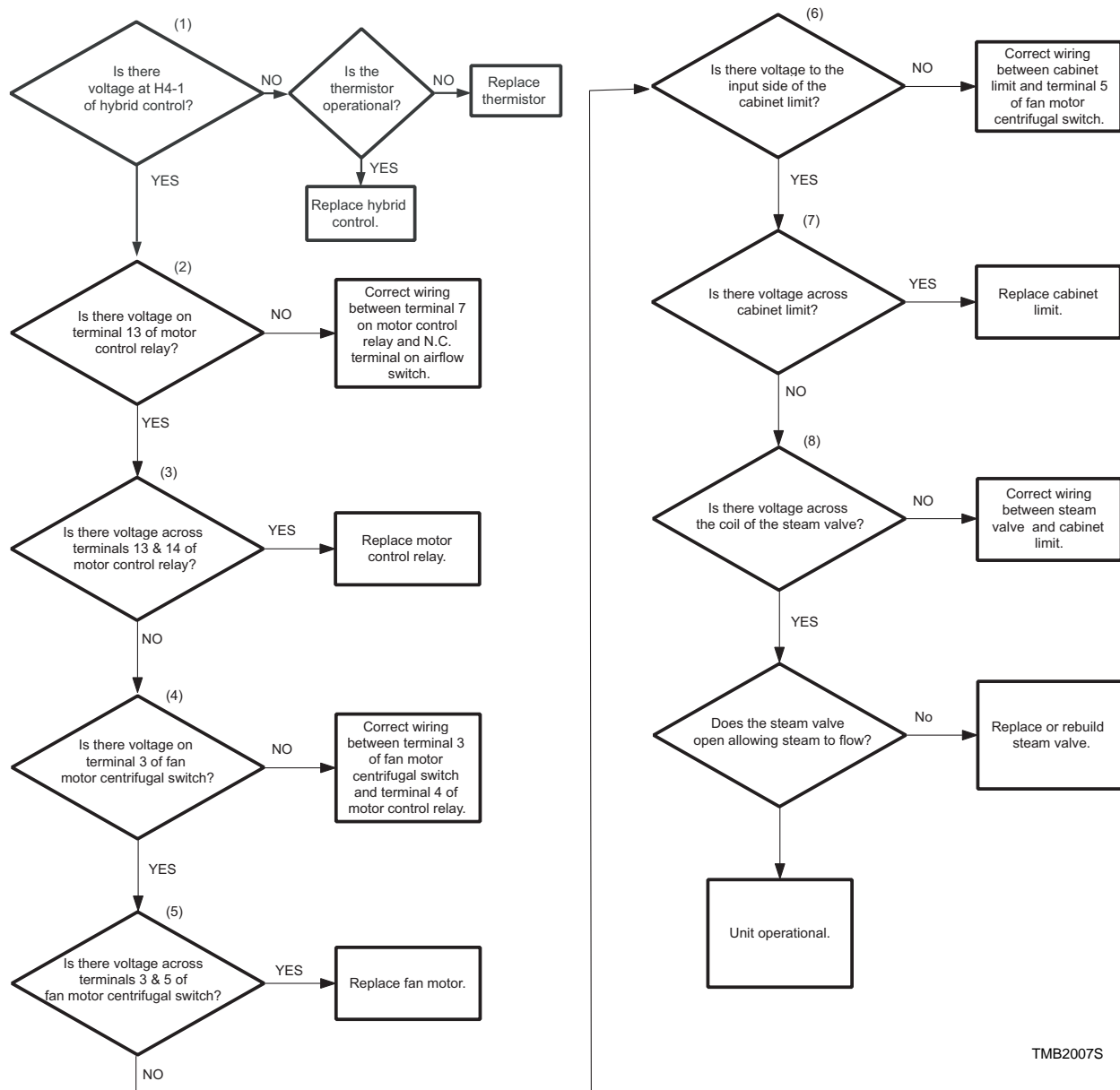


TMB1970S

## 40. Unit Will Not Heat – Steam – OPL Models (T30 Models Only)

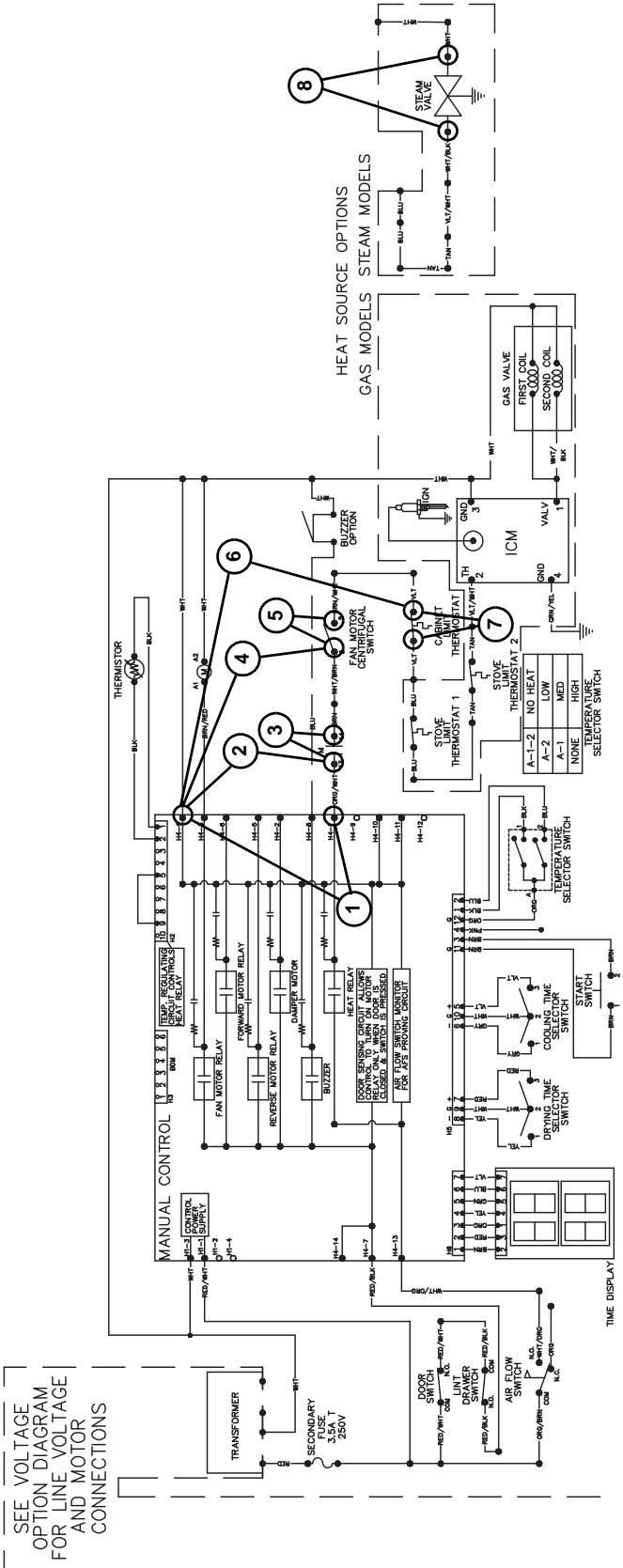
Note: Tests are conducted with unit running and calling for heat.

All voltage checks are referenced to transformer neutral.



TMB2007S

Unit Will Not Heat – Steam – OPL Models (T30 Models Only)

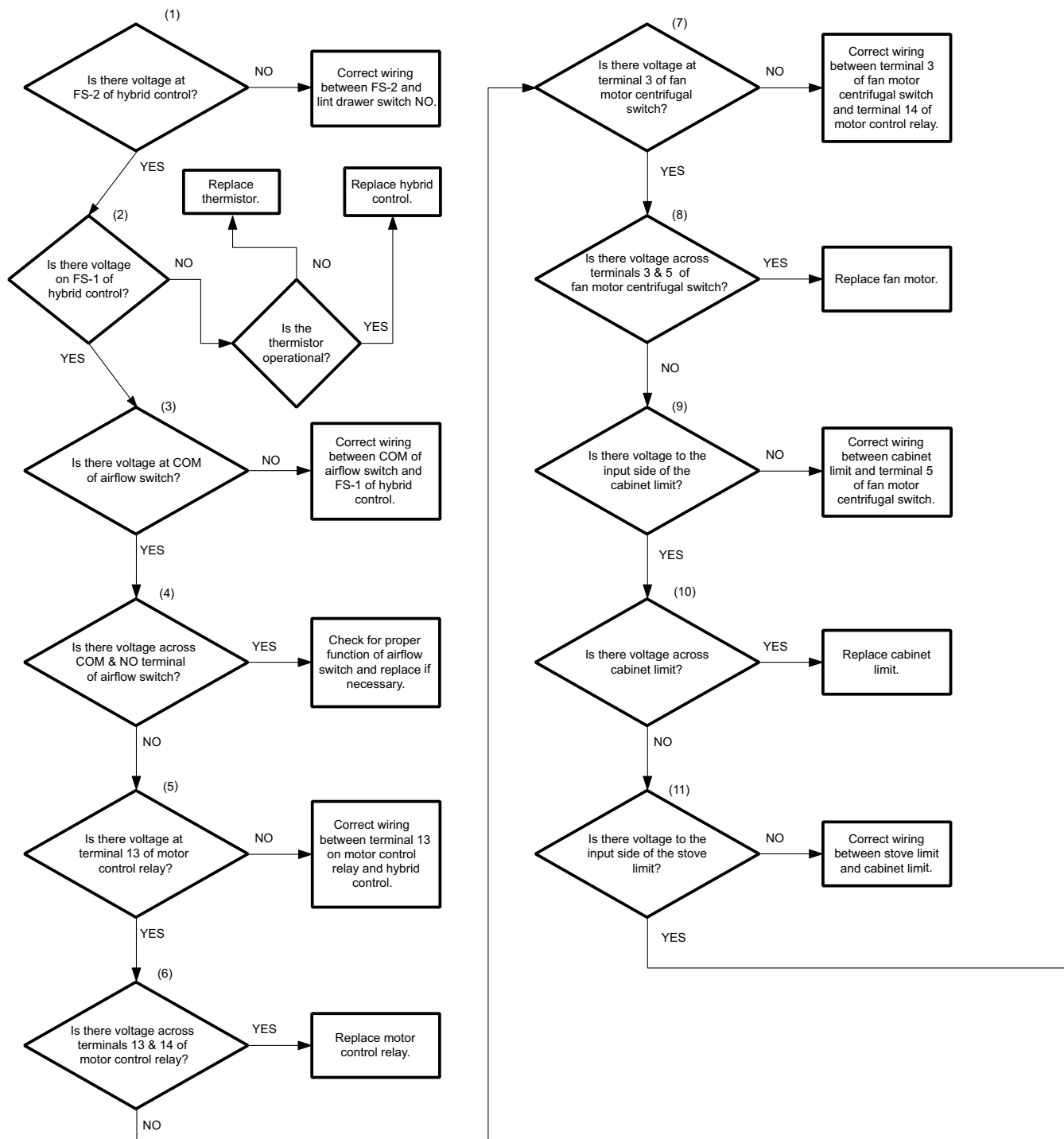


TMB1970S

## 41. Unit Will Not Heat – Electric Coin (T30 Models Only)

Note: Tests are conducted with unit running and calling for heat.

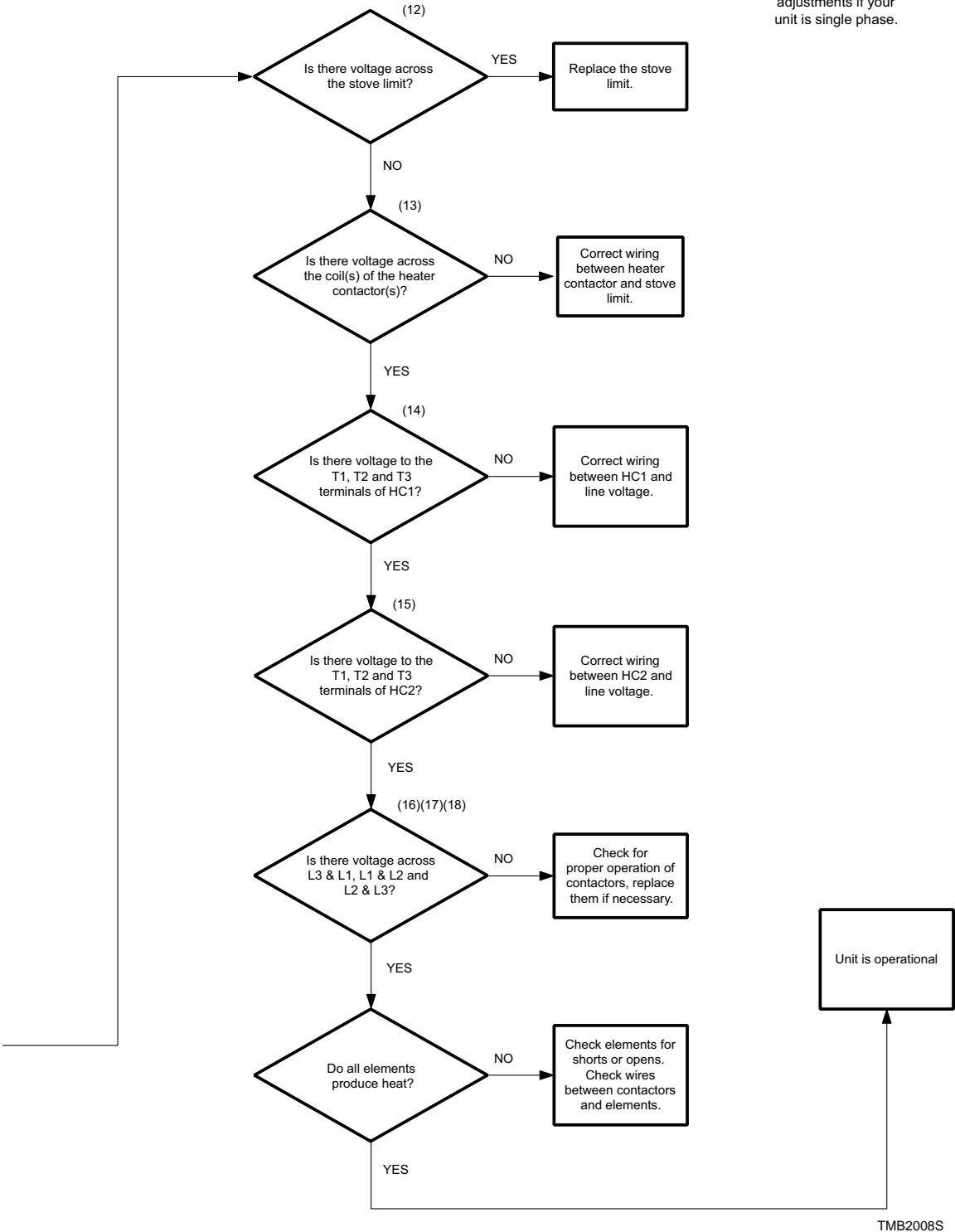
All voltage checks are referenced to transformer neutral.



TMB1989S

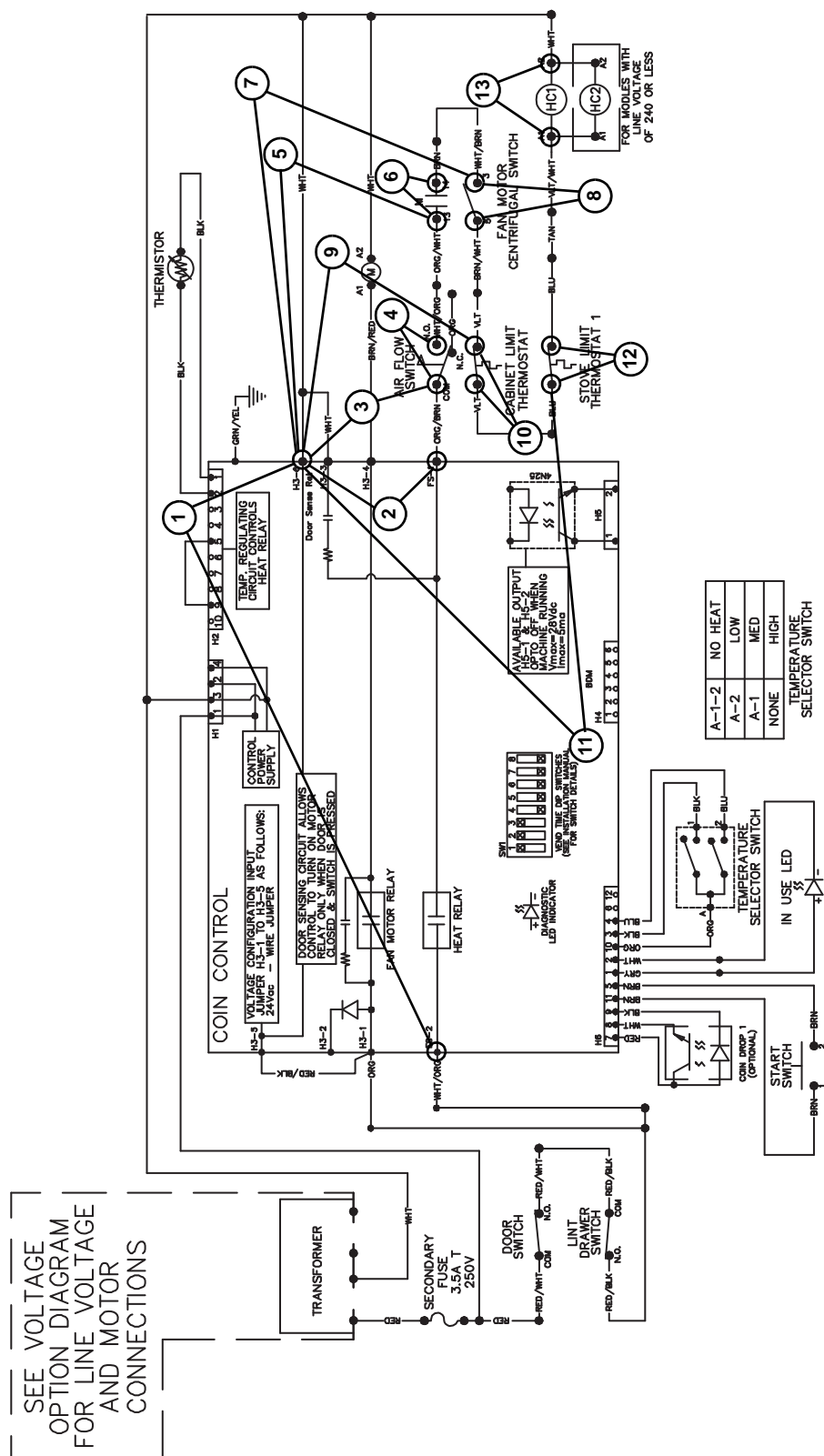
# 41. Unit Will Not Heat – Electric Coin (T30 Models Only) (continued)

Note: Please make the appropriate adjustments if your unit is single phase.



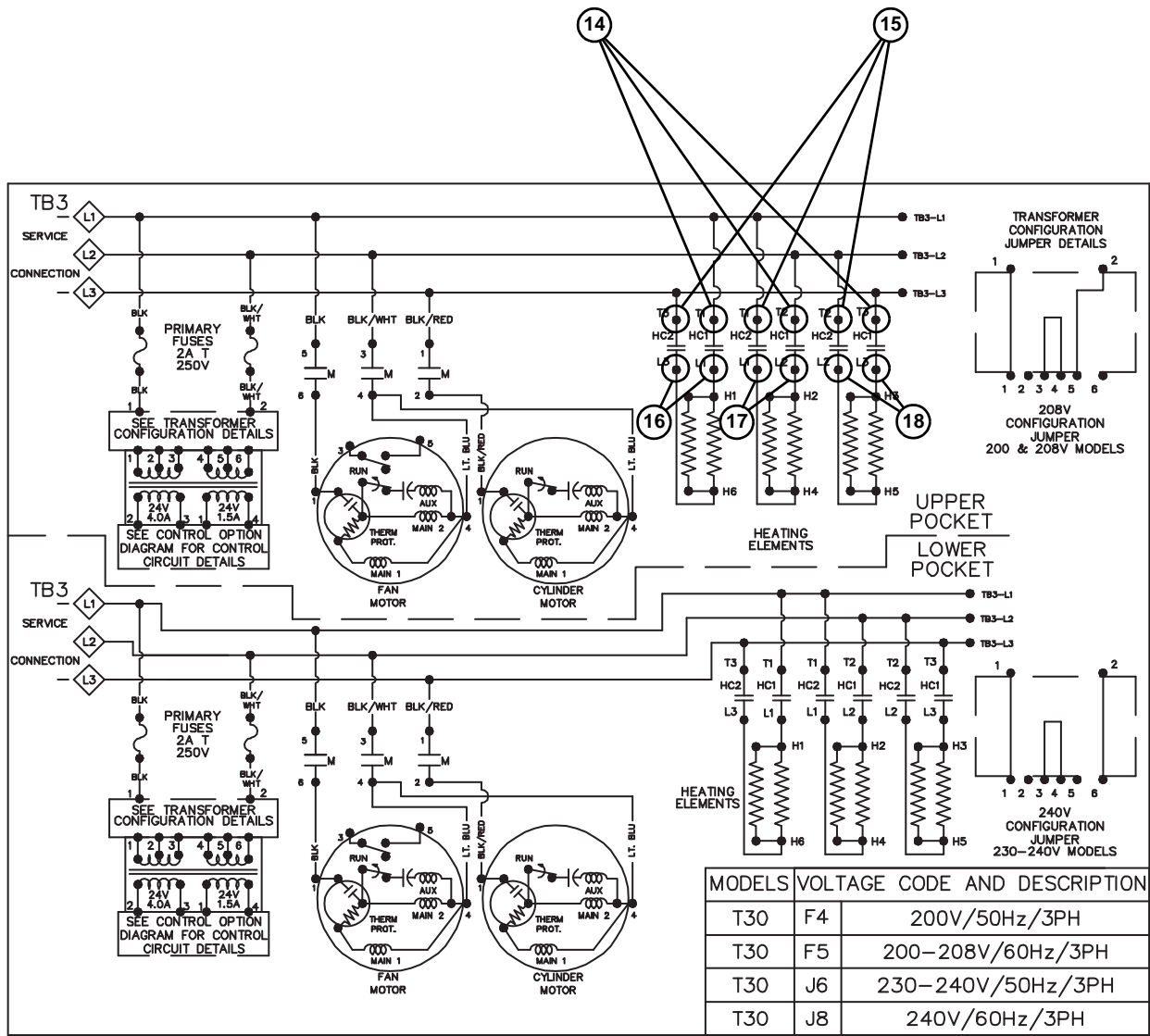
Please see following 2 pages for wiring diagram information.

## Unit Will Not Heat – Electric Coin (T30 Models Only) (Sheet 1 of 2)



TMB1974S

Unit Will Not Heat – Electric Coin (T30 Models Only) (Sheet 2 of 2)

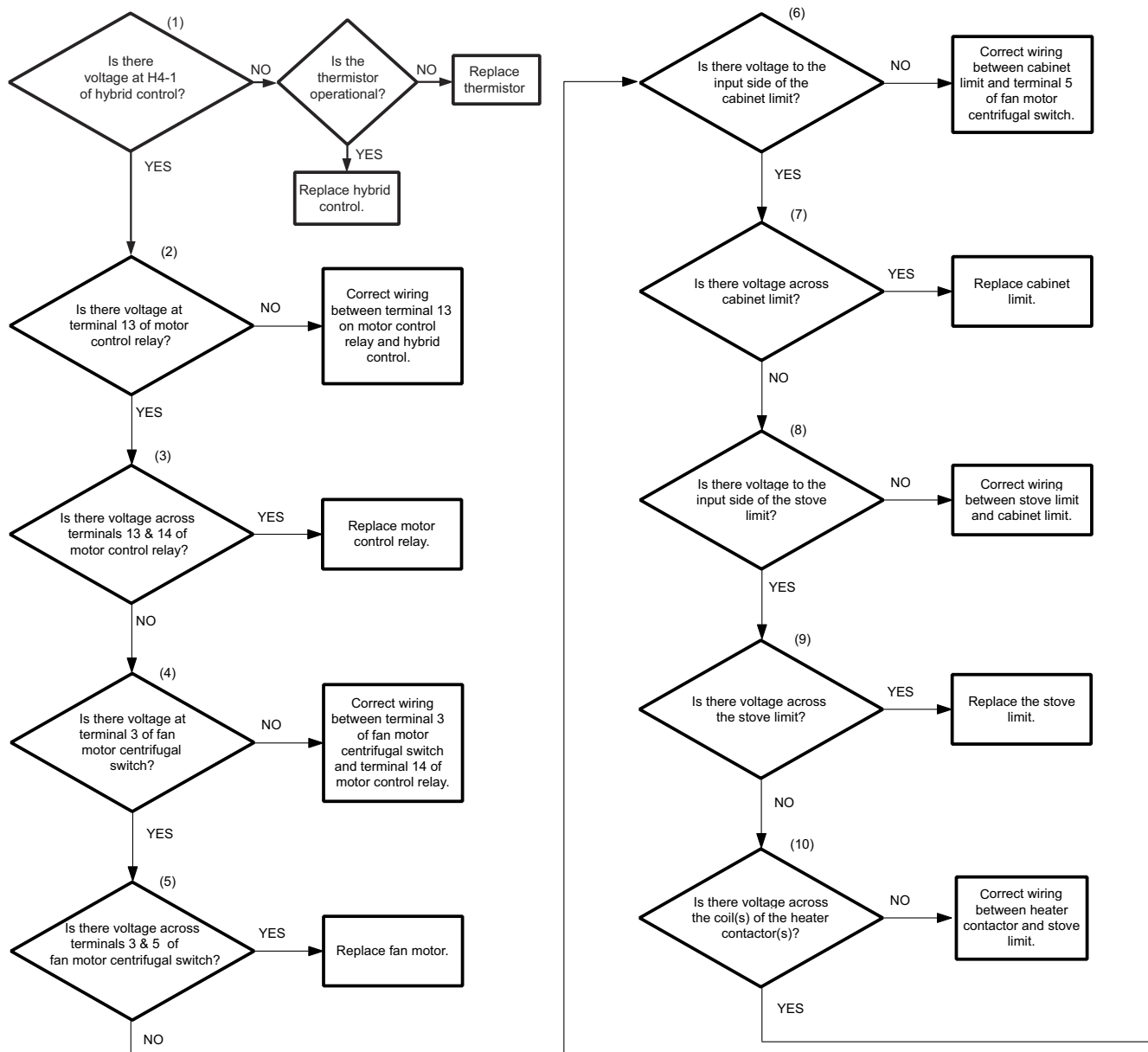


TMB1975S

## 42. Unit Will Not Heat – Electric OPL (T30 Models Only)

Note: Tests are conducted with unit running and calling for heat.

All voltage checks are referenced to transformer neutral.

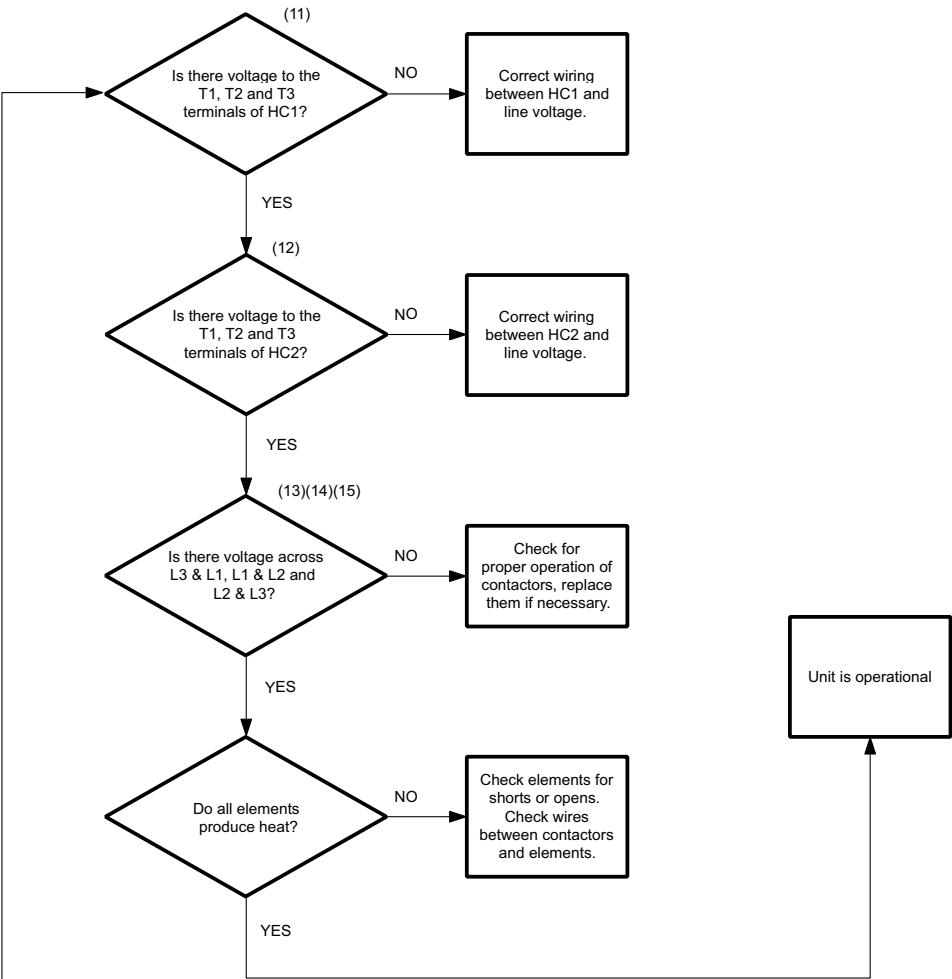


TMB1989S



42. Unit Will Not Heat – Electric OPL (T30 Models Only) (continued)

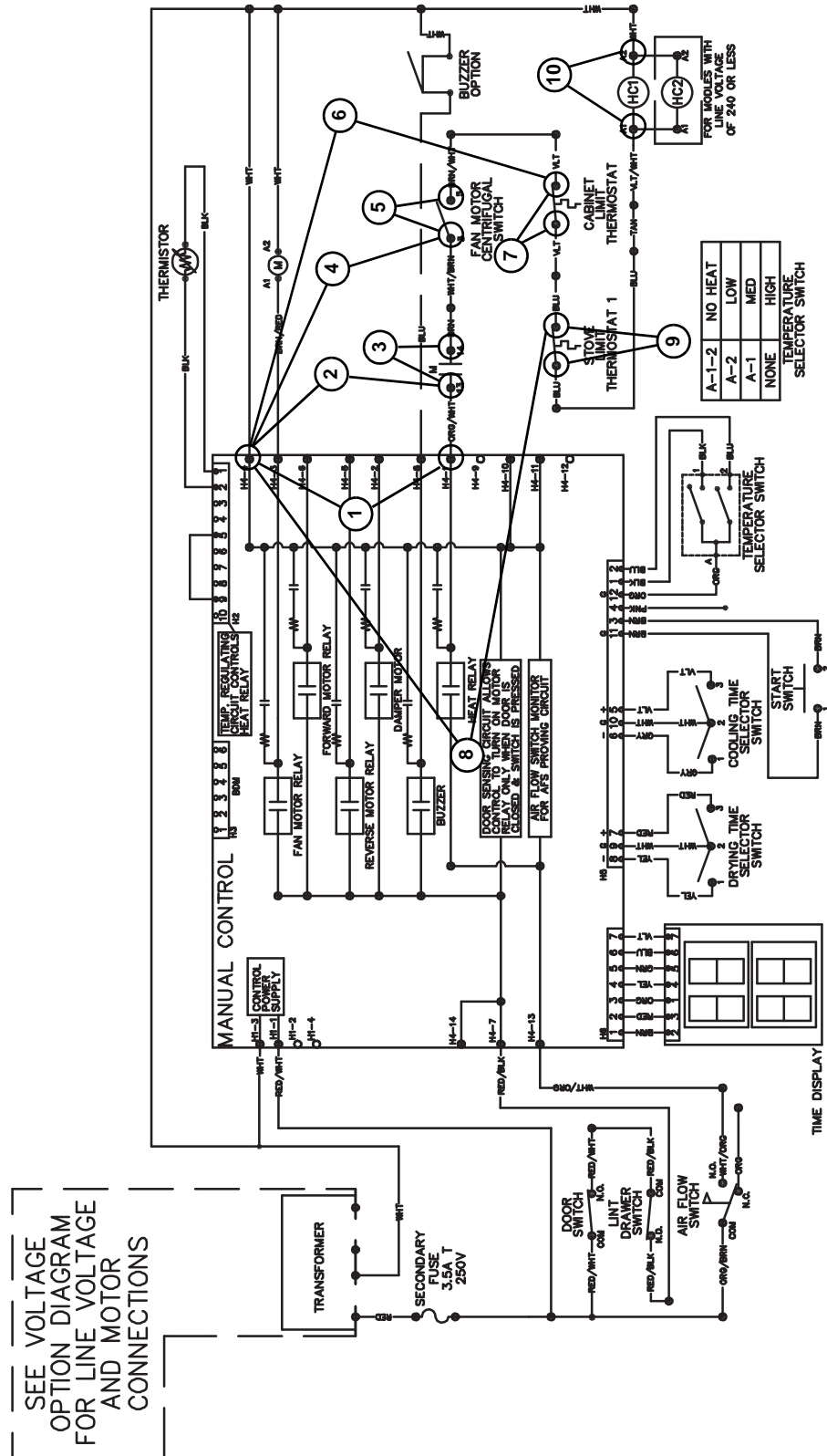
Note: Please make the appropriate adjustments if your unit is single phase.



TMB2009S

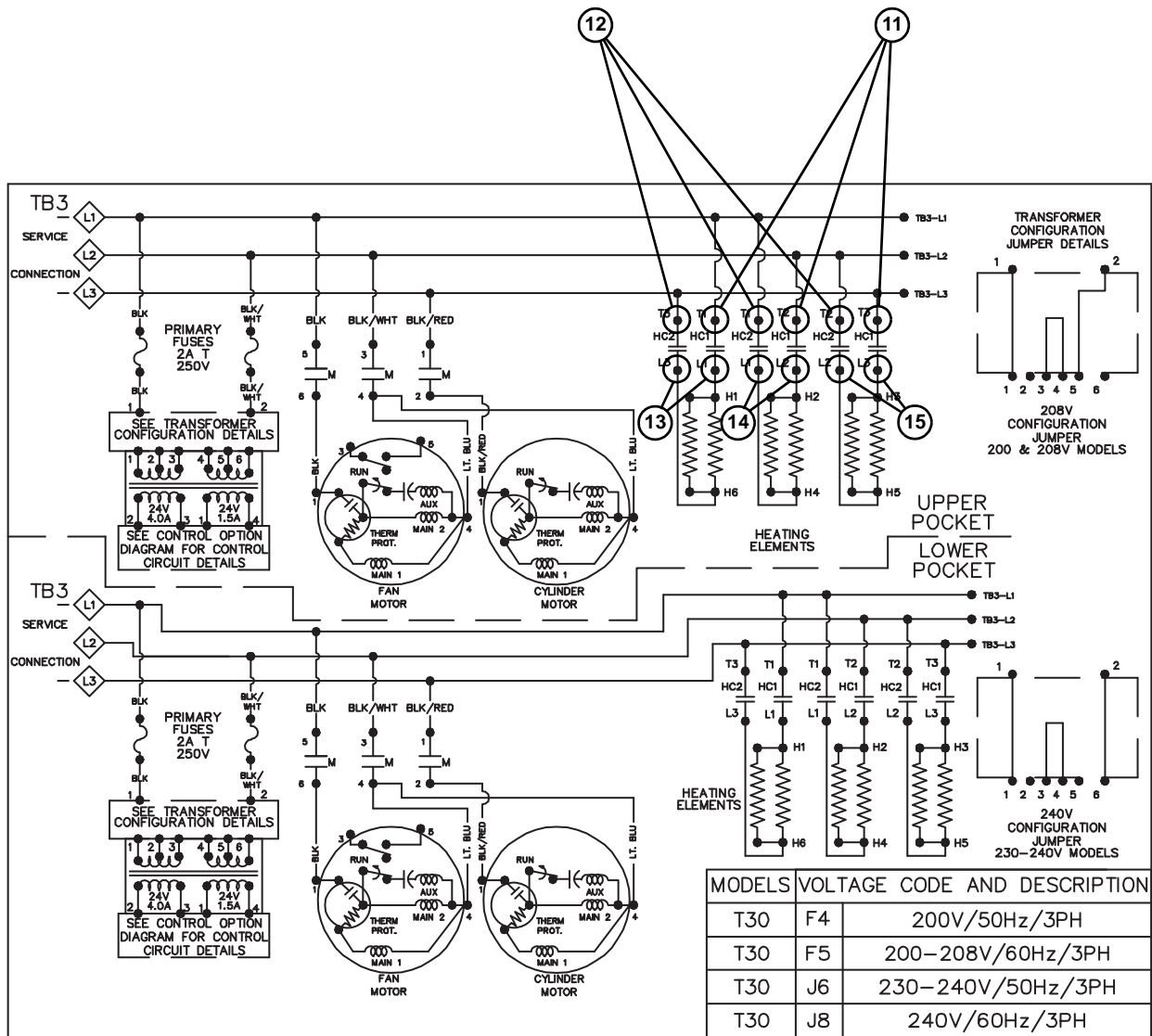
Please see following 2 pages for wiring diagram information.

## Unit Will Not Heat – Electric OPL (T30 Models Only) (Sheet 1 of 2)



TMB1976S

Unit Will Not Heat – Electric OPL (T30 Models Only) (Sheet 2 of 2)



TMB1975S



## WARNING

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

W002

## 43. Error Codes

Display	Definition	Corrective Action
OP	Open thermistor error.	<ul style="list-style-type: none"> <li>• Check thermistor. Replace if inoperative.</li> <li>• Check wiring between control and thermistor. Refer to wiring diagram for proper wiring.</li> <li>• Check control. Replace if inoperative.</li> </ul>
SH	Shorted thermistor error.	<ul style="list-style-type: none"> <li>• Check thermistor. Replace if inoperative.</li> <li>• Check wiring between control and thermistor. Refer to wiring diagram for proper wiring.</li> <li>• Check control. Replace if inoperative.</li> </ul>
AF-1	Airflow switch closed when cycle started.	<ul style="list-style-type: none"> <li>• Check airflow switch. Replace if inoperative.</li> </ul>
AF-2	Airflow switch failed to closed after cycle started.	<ul style="list-style-type: none"> <li>• Check airflow switch. Replace if inoperative.</li> </ul>
AF (flashing)	Airflow switch opened/closed 5 or more times in a running cycle.	<ul style="list-style-type: none"> <li>• Check airflow switch. Replace if inoperative.</li> </ul>

# Section 8

## Quantum Control Troubleshooting

Models with LC, LX, LY, WC, WX and WY Control Suffixes



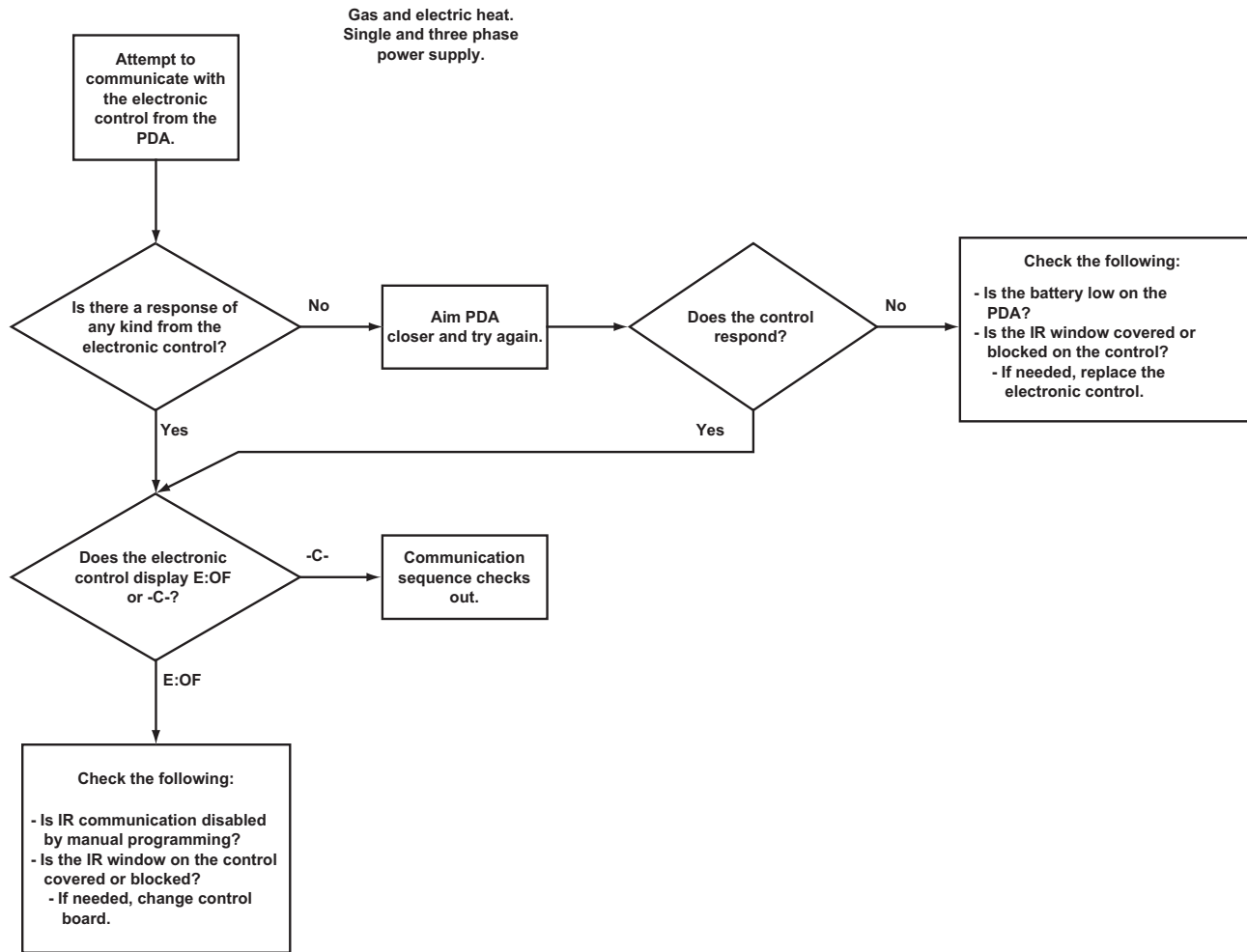
### WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

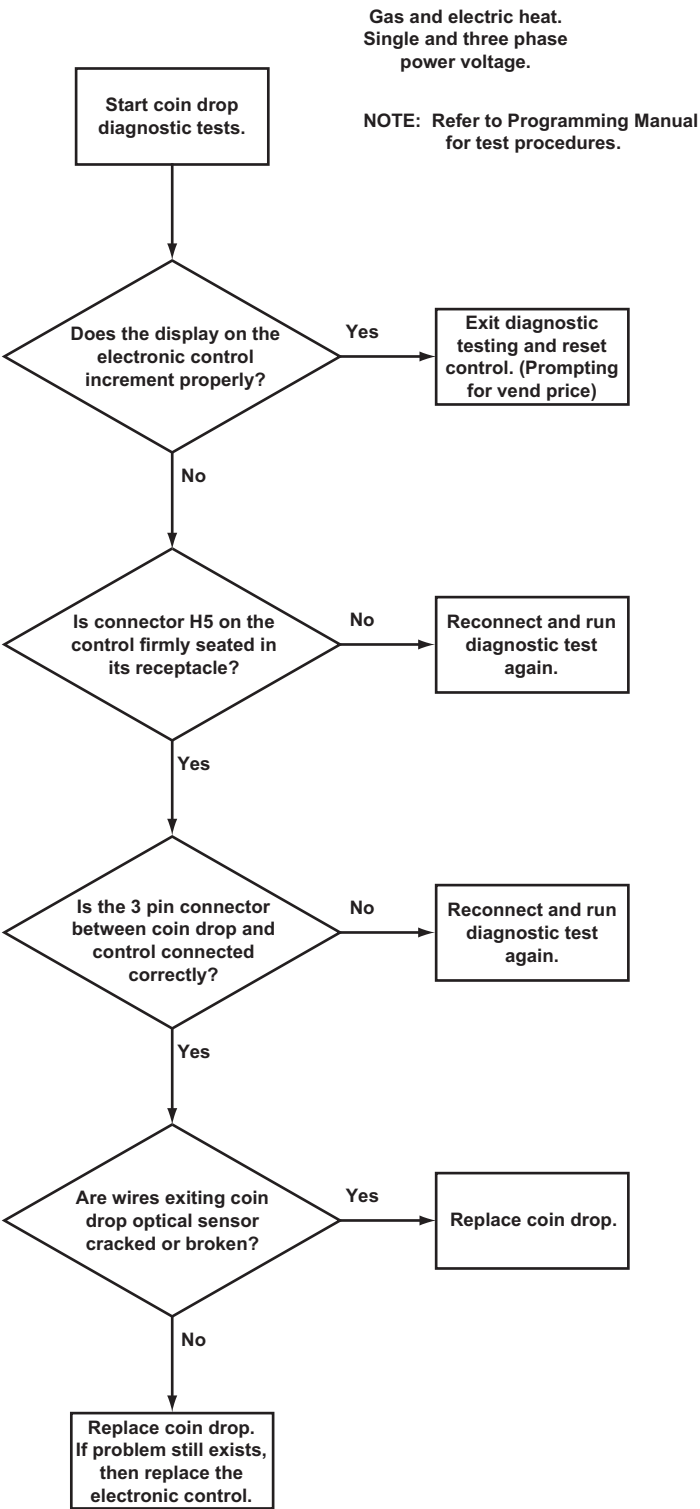
W002

## 44. No Infrared Communication



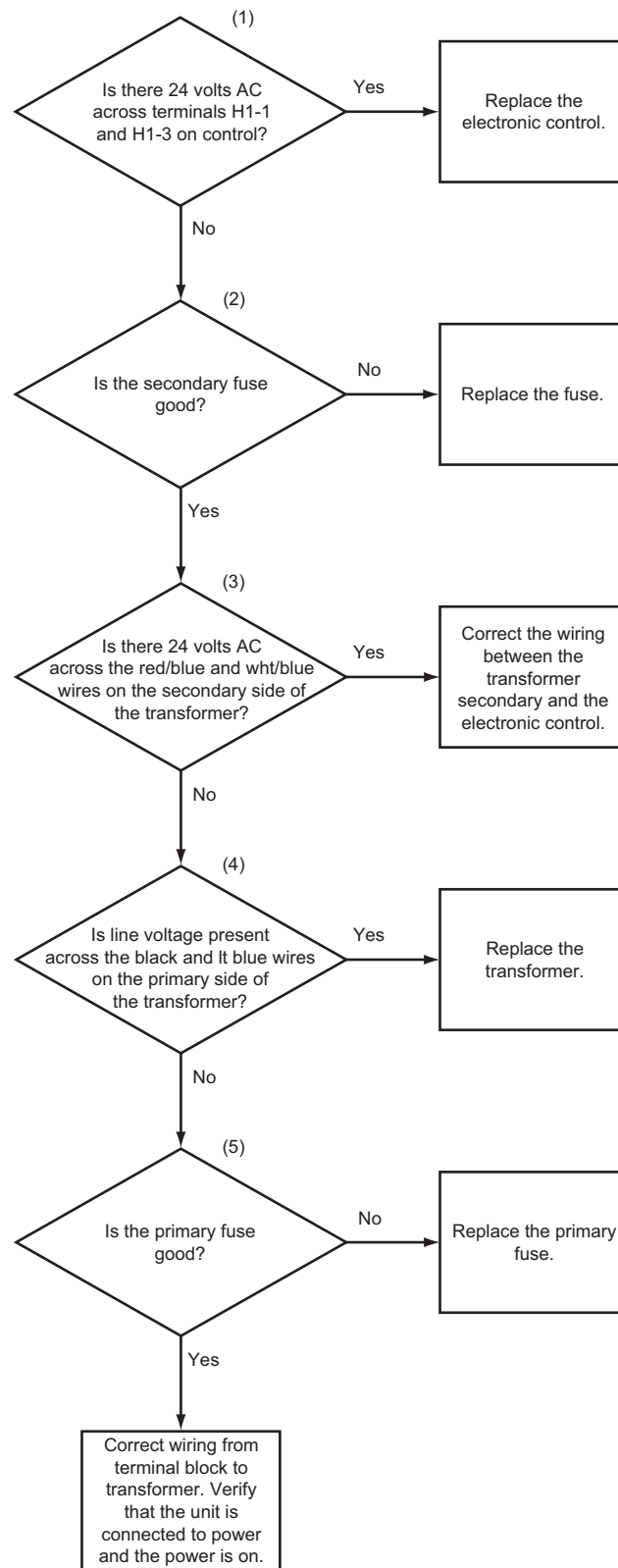
TMB2269S

# 45. Coins Ignored When Entered



TMB1794S

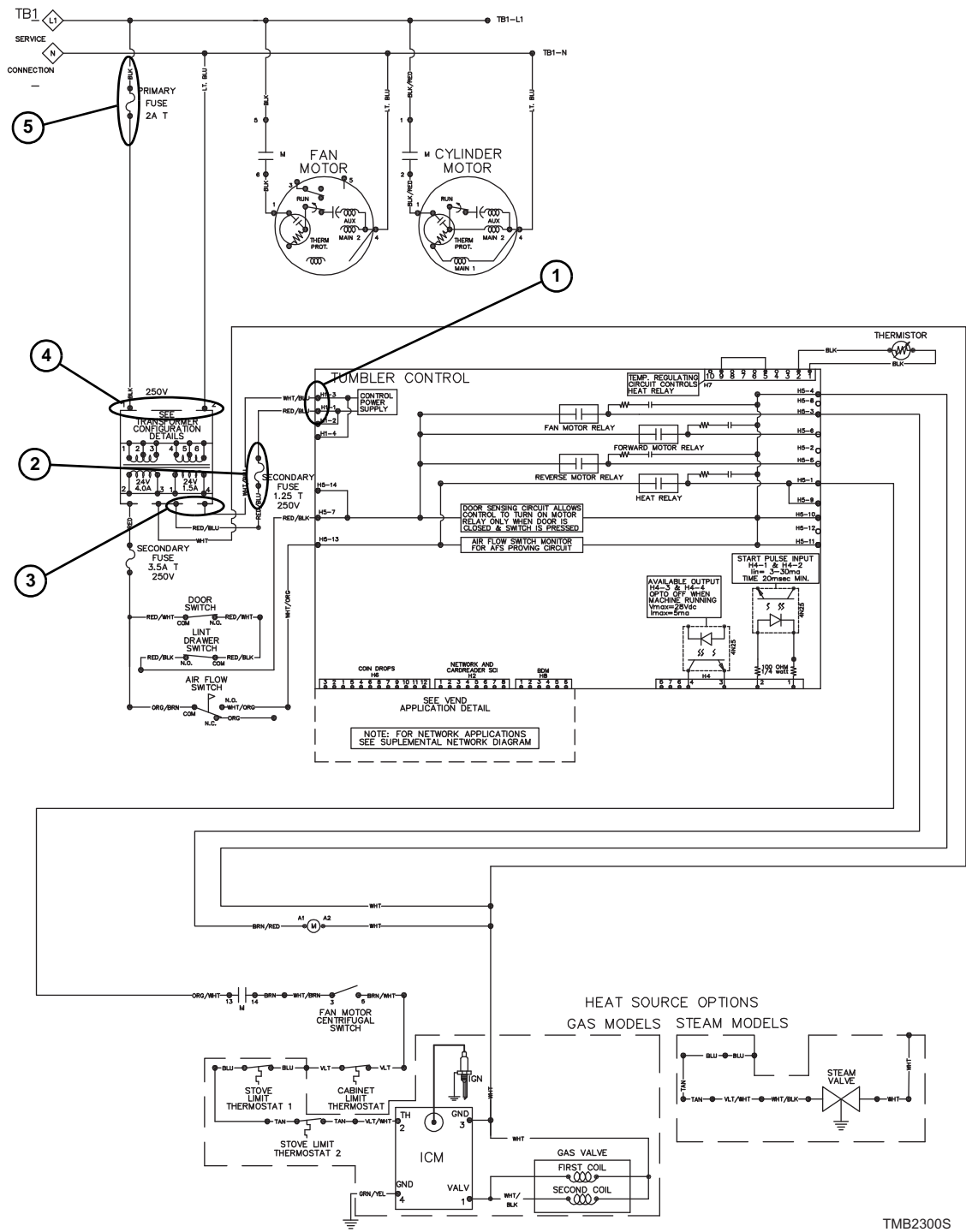
## 46. No Display



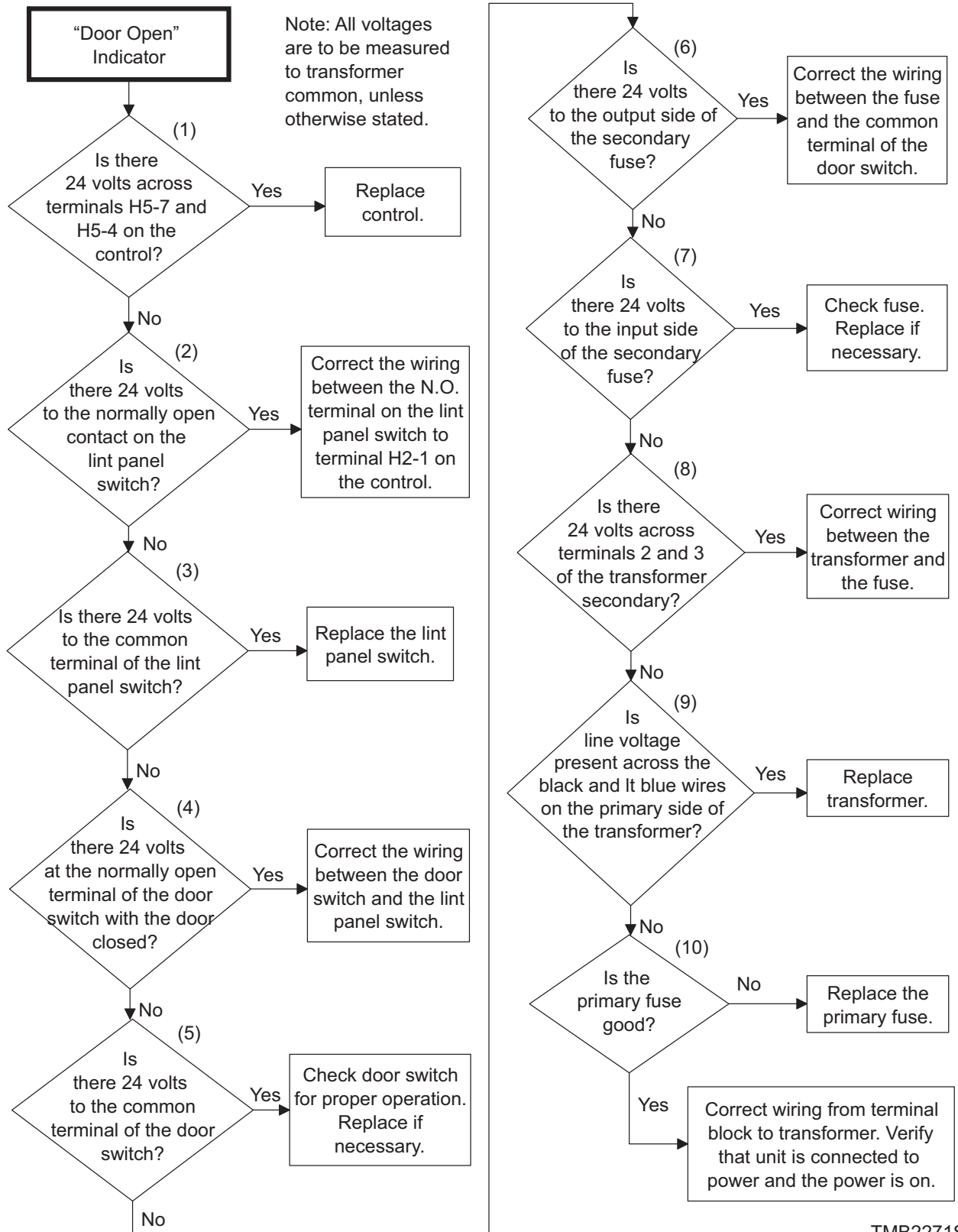
TMB2299S



No Display

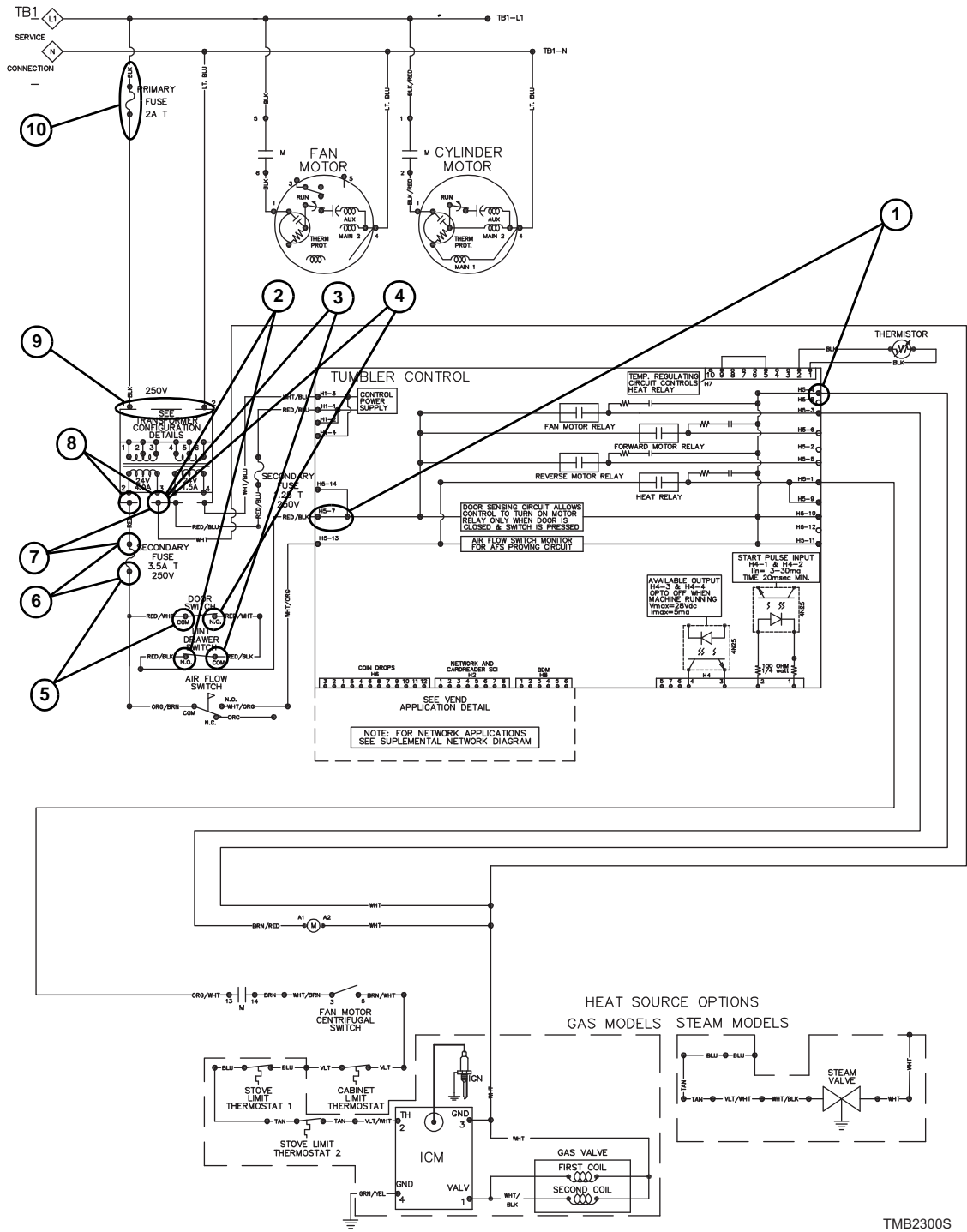


## 47. "Door Open" Indicator



TMB2271S

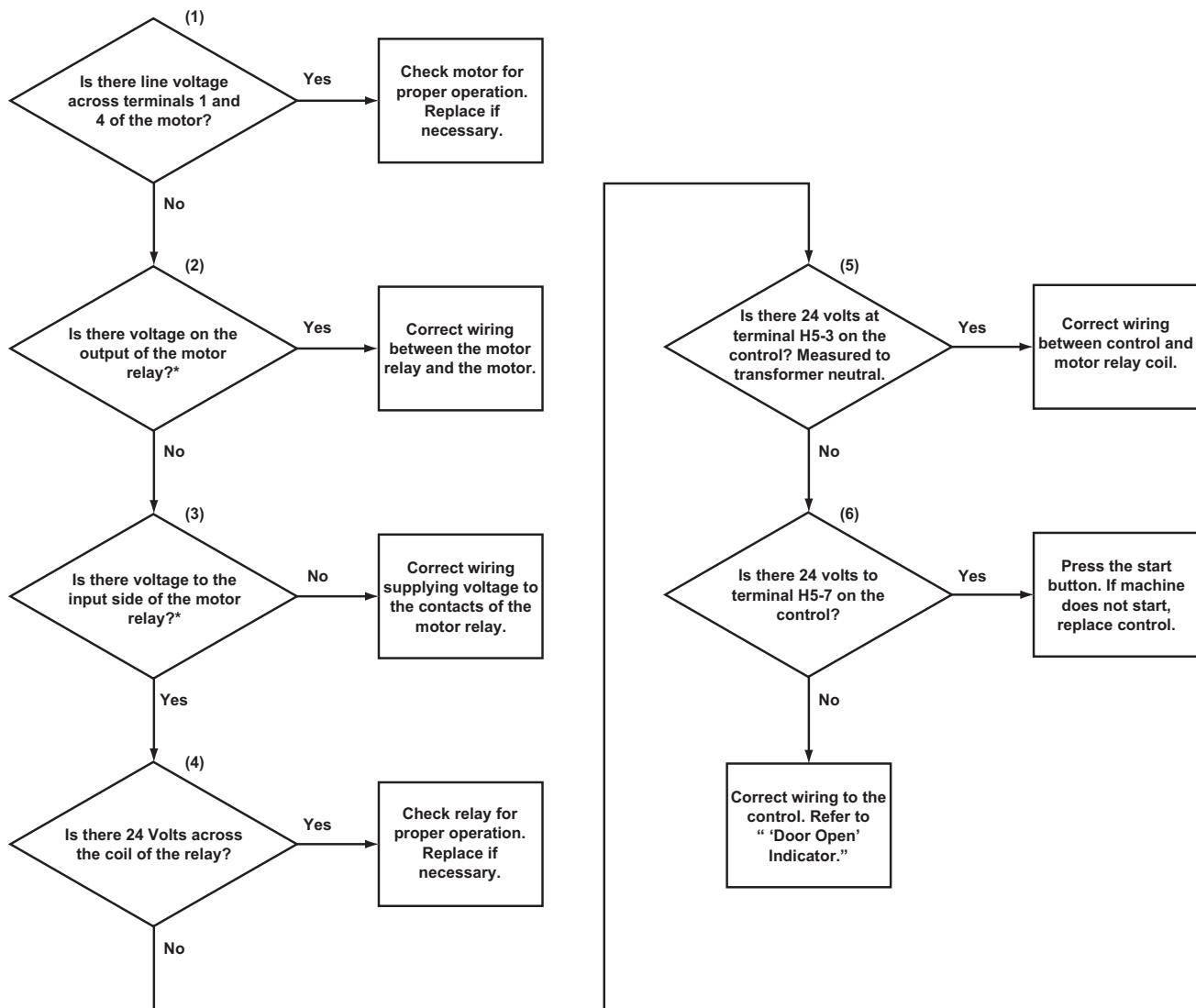
“Door Open” Indicator



TMB2300S

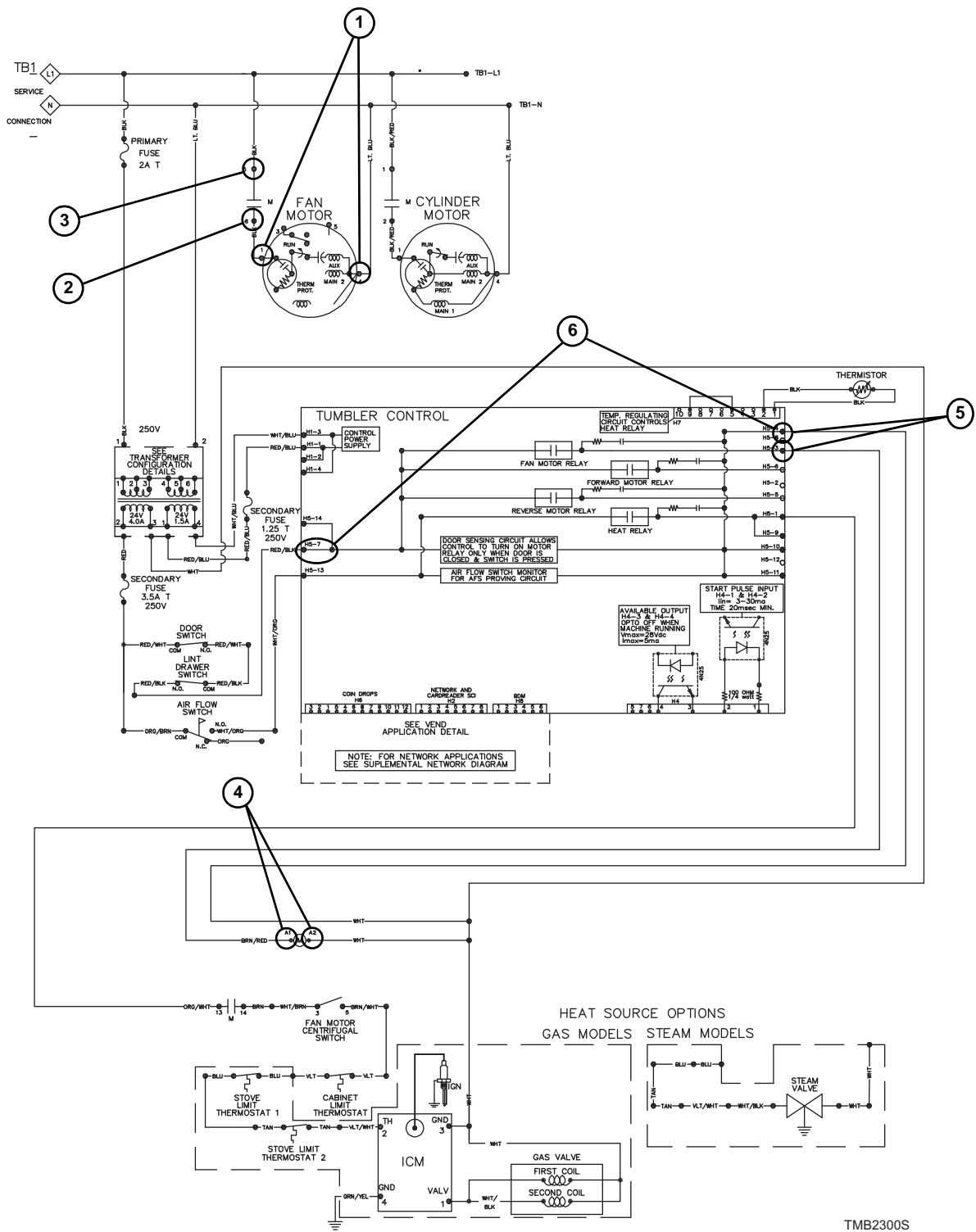
## 48. No Start/Run

\*Note: For steps 2 and 3. For 208/240 1 phase, both lines to the motor are controlled by contacts. Please check second set of contacts.  
For 3 phase units, the three legs supplied to the motor will be controlled by N.O. contacts. Please check all three legs.



TMB2272S

No Start/Run

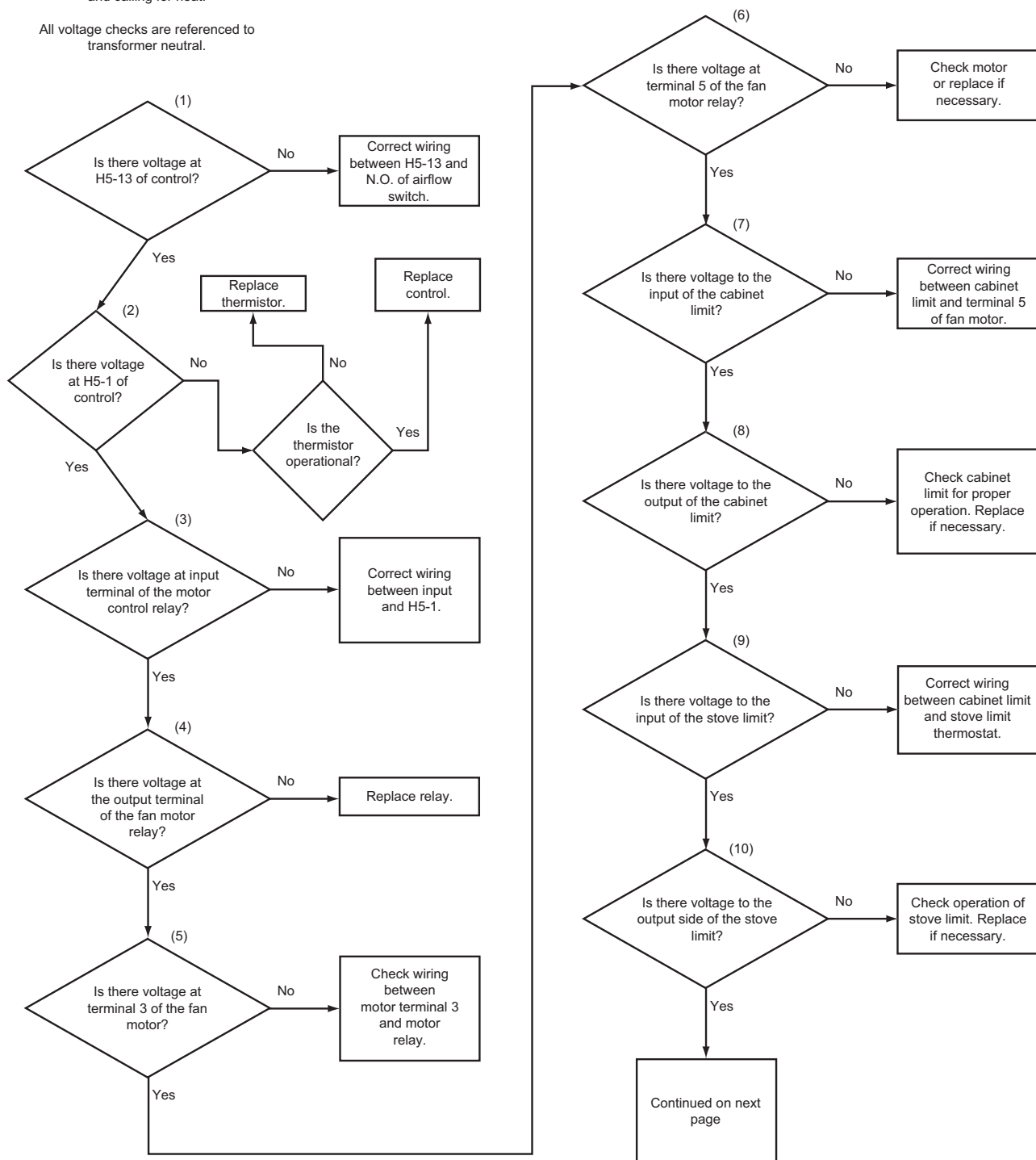


TMB2300S

## 49. Unit Will Not Heat – Gas

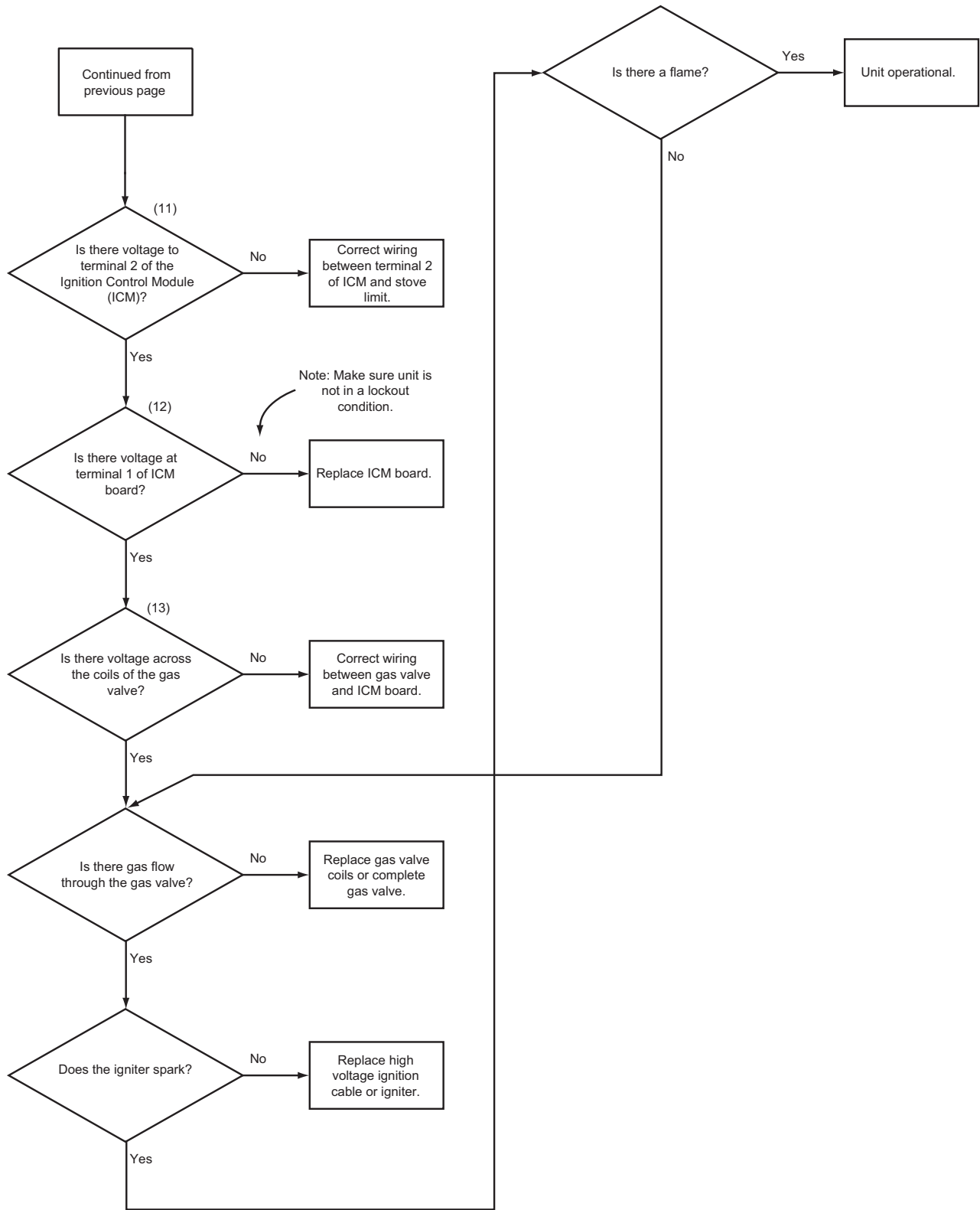
Note: Tests are conducted with unit running and calling for heat.

All voltage checks are referenced to transformer neutral.



TMB2275S-a

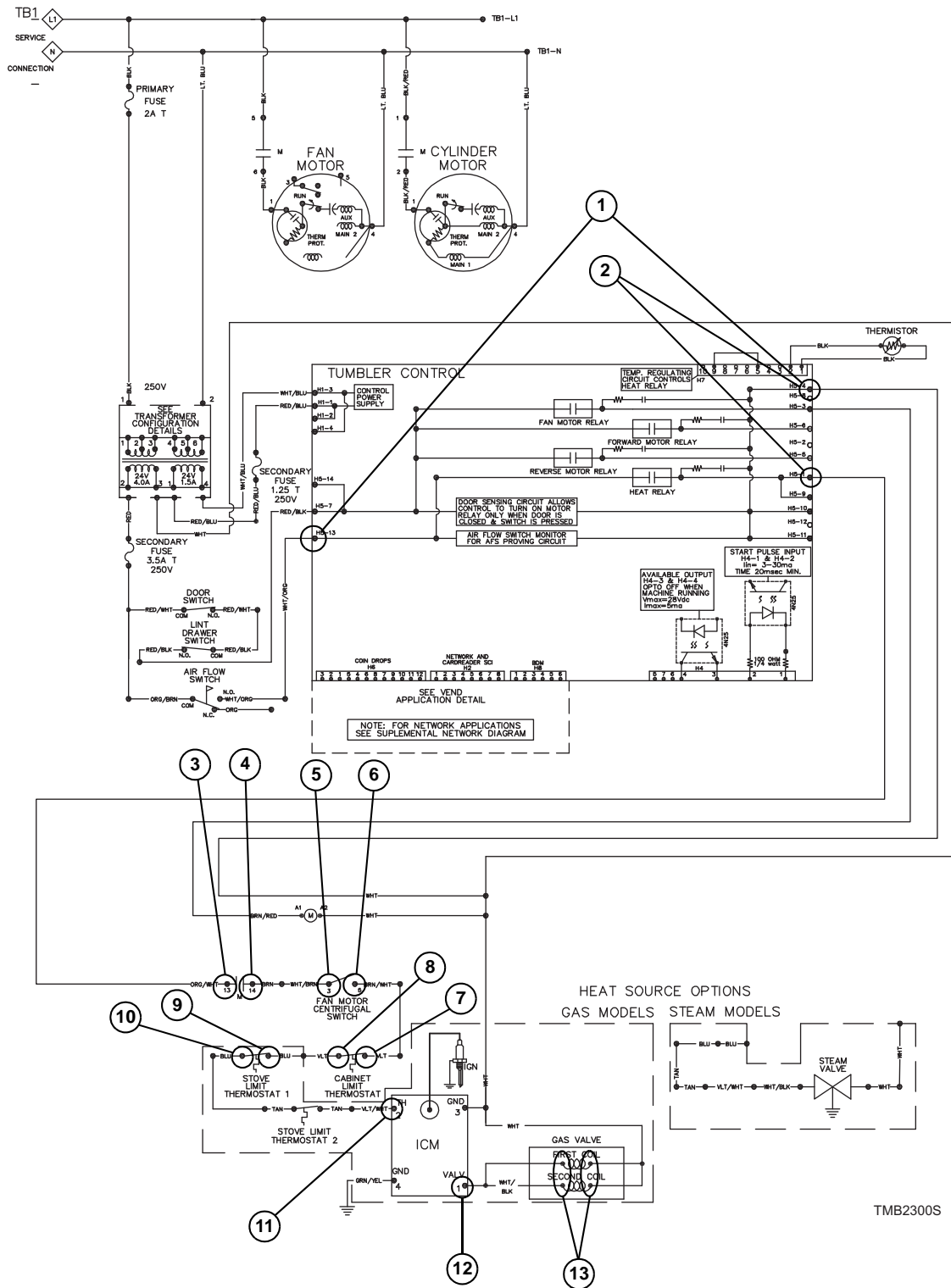
49. Unit Will Not Heat – Gas (continued)



TMB2275S-b

Please see following page for wiring diagram information.

# Unit Will Not Heat – Gas

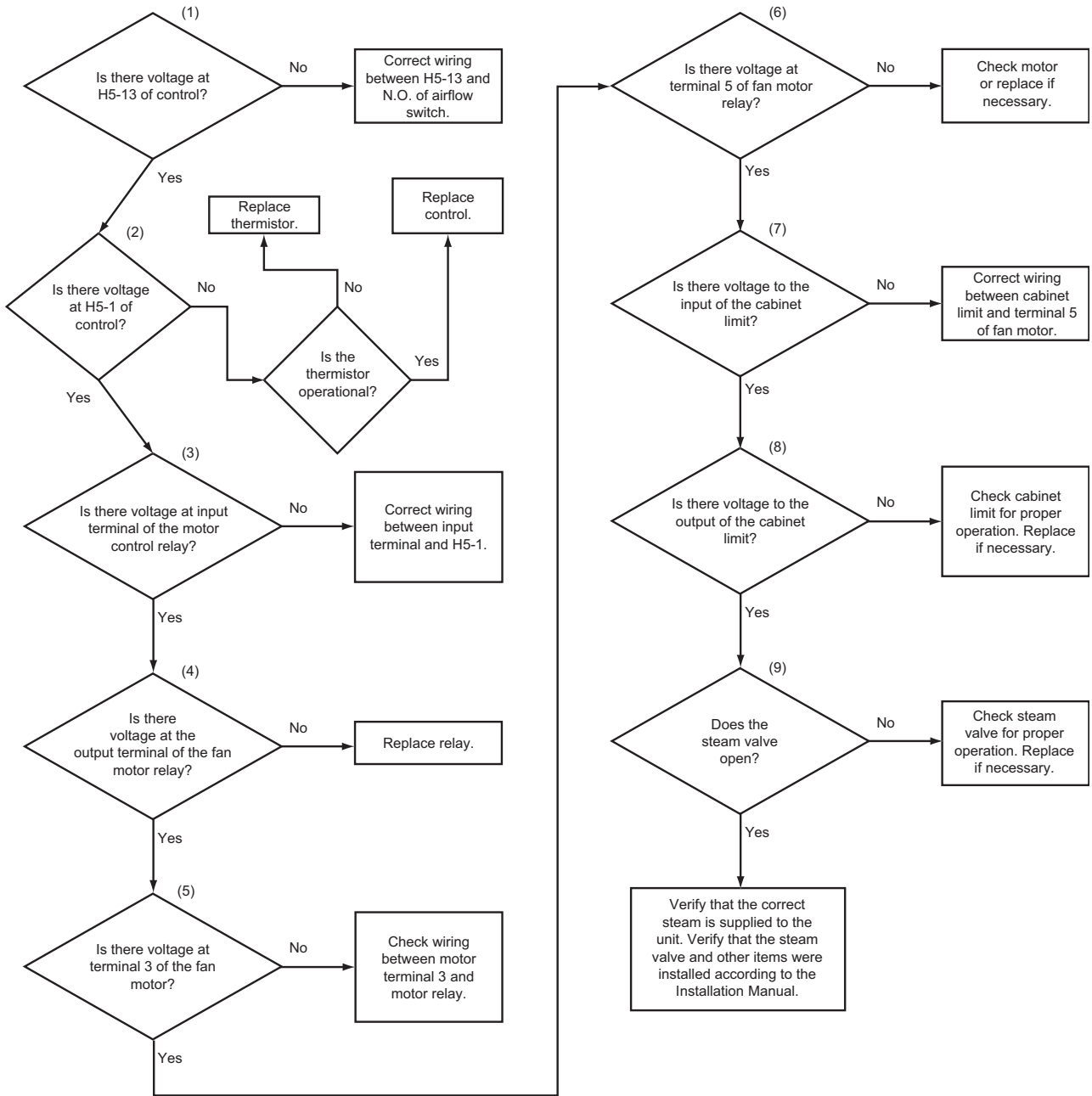




# 50. Unit Will Not Heat – Steam

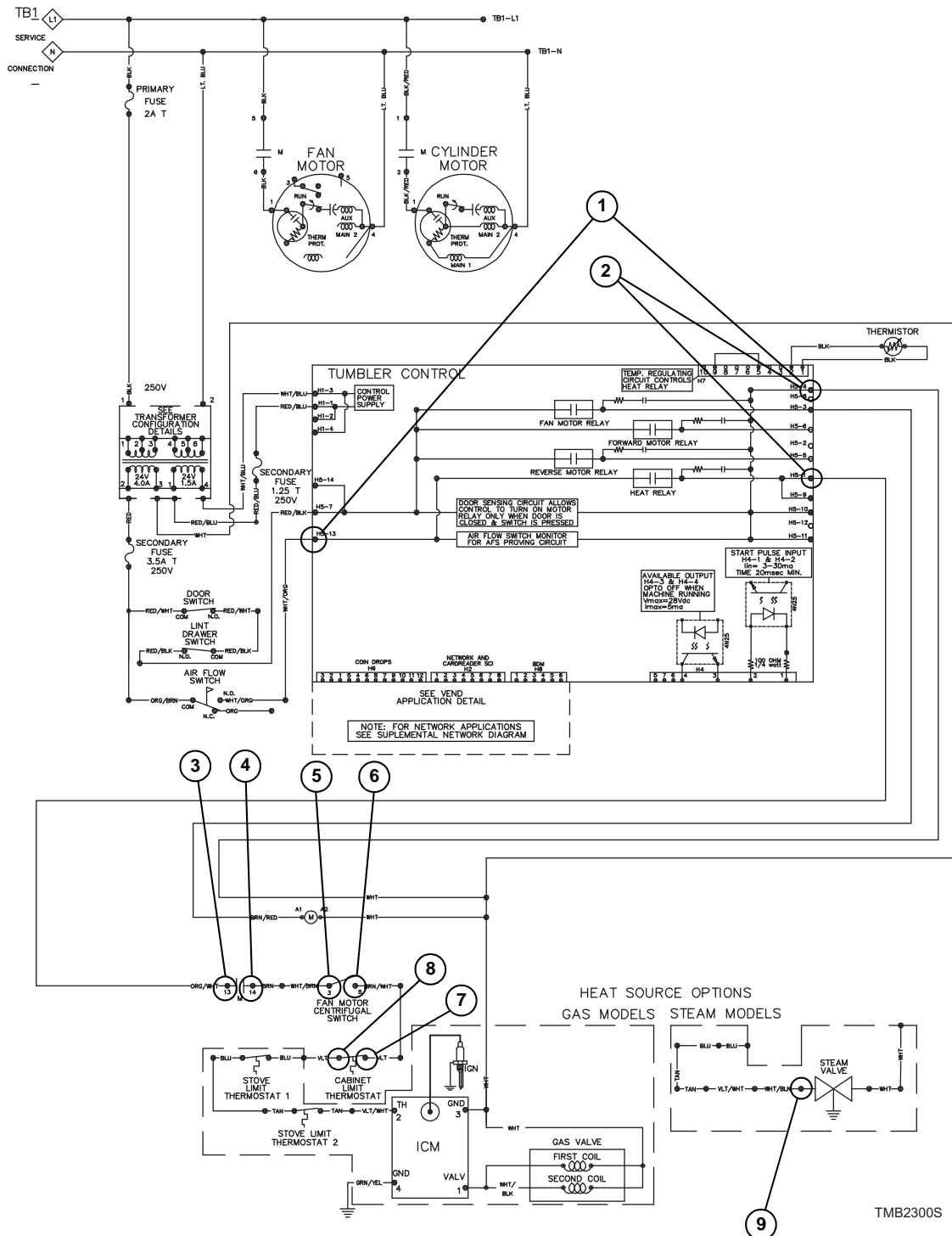
Note: Tests are conducted with unit running and calling for heat.

All voltage checks are referenced to transformer neutral.



TMB2276S

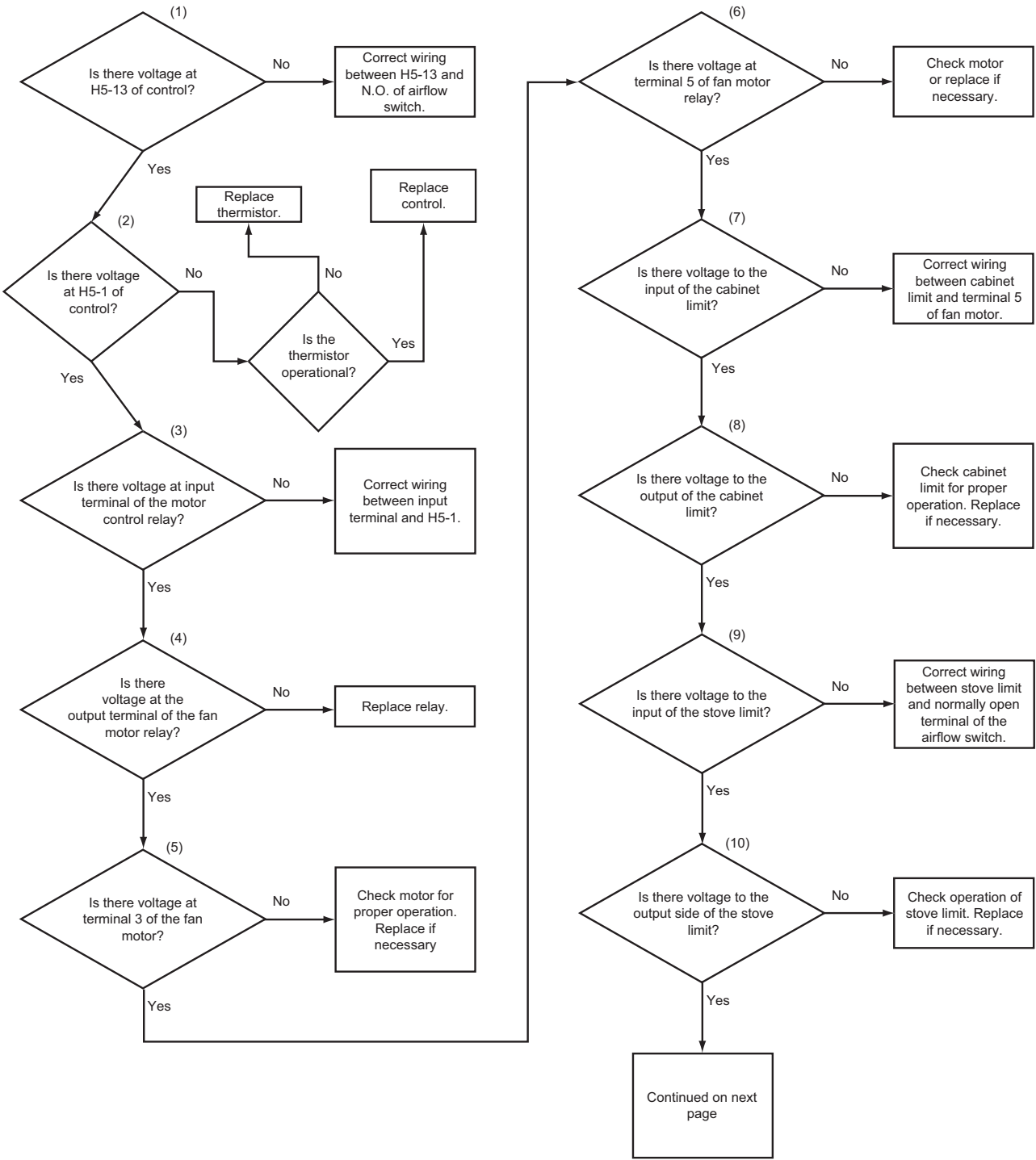
# Unit Will Not Heat – Steam



# 51. Unit Will Not Heat – Electric

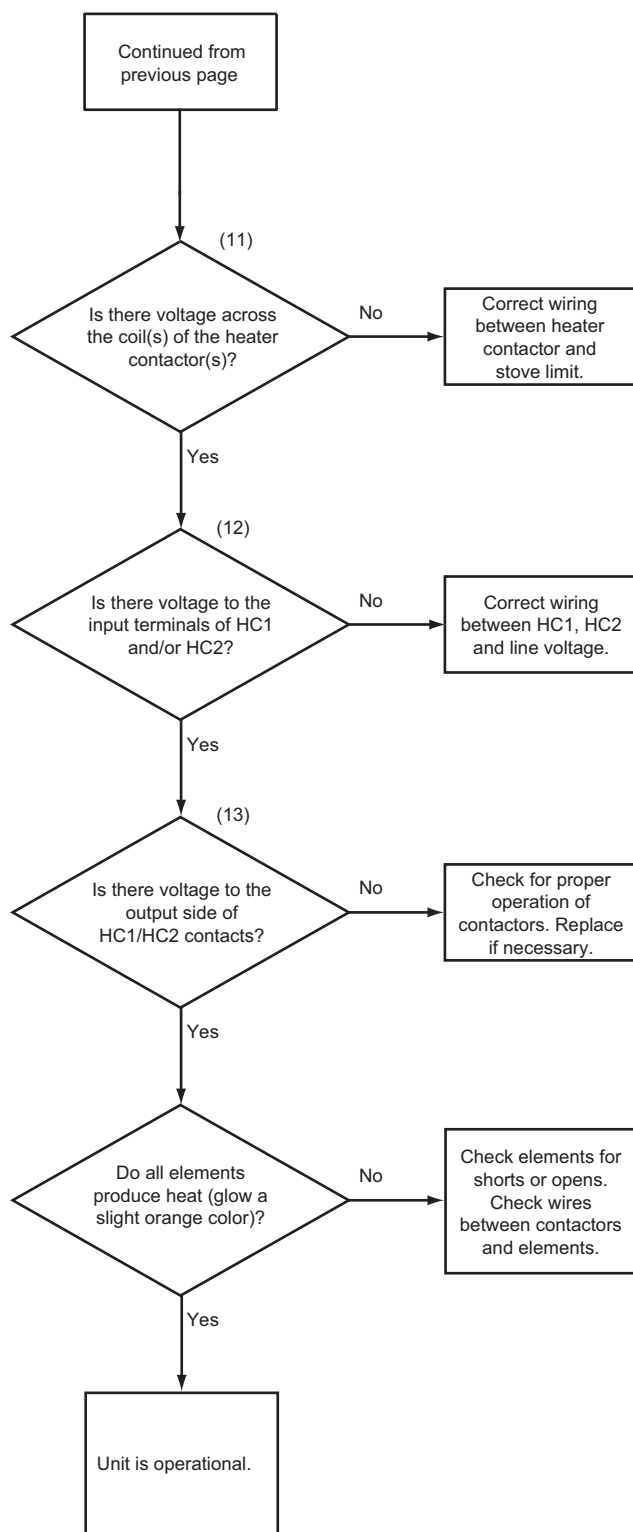
Note: Tests are conducted with unit running and calling for heat.

All voltage checks are referenced to transformer neutral.



TMB2277S-a

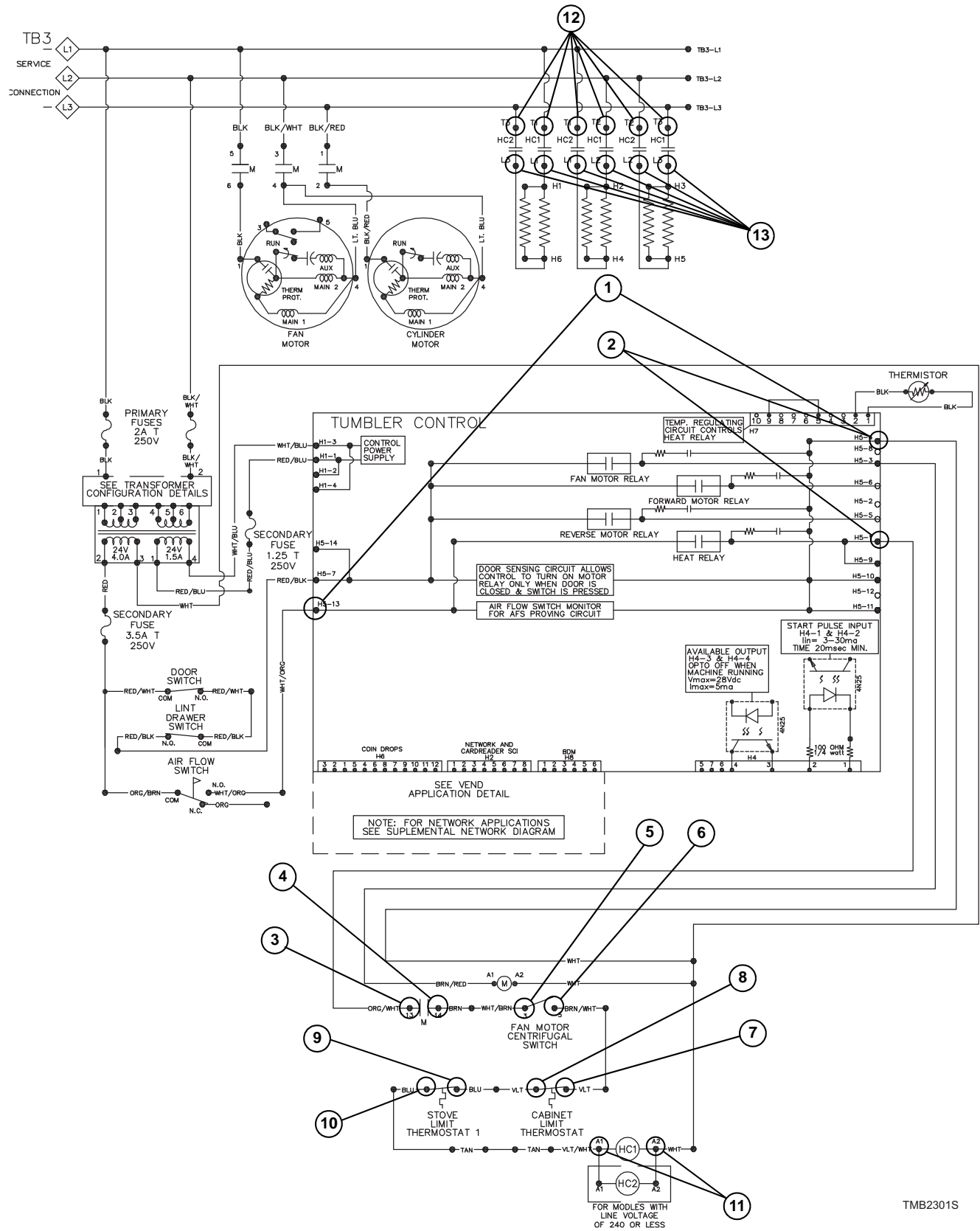
## 51. Unit Will Not Heat – Electric (continued)



TMB2277S-b

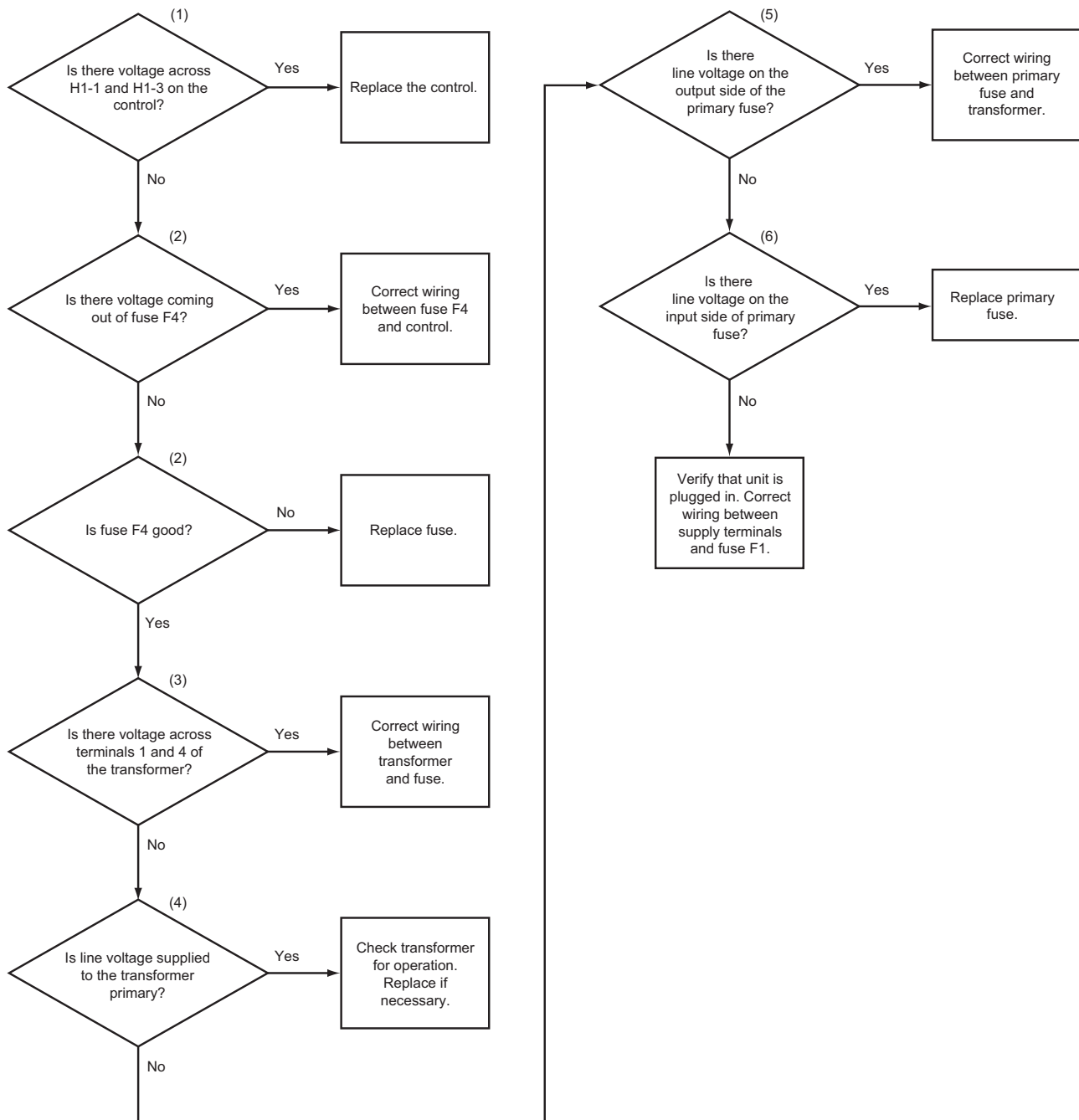
**Please see following page for wiring diagram information.**

Unit Will Not Heat – Electric



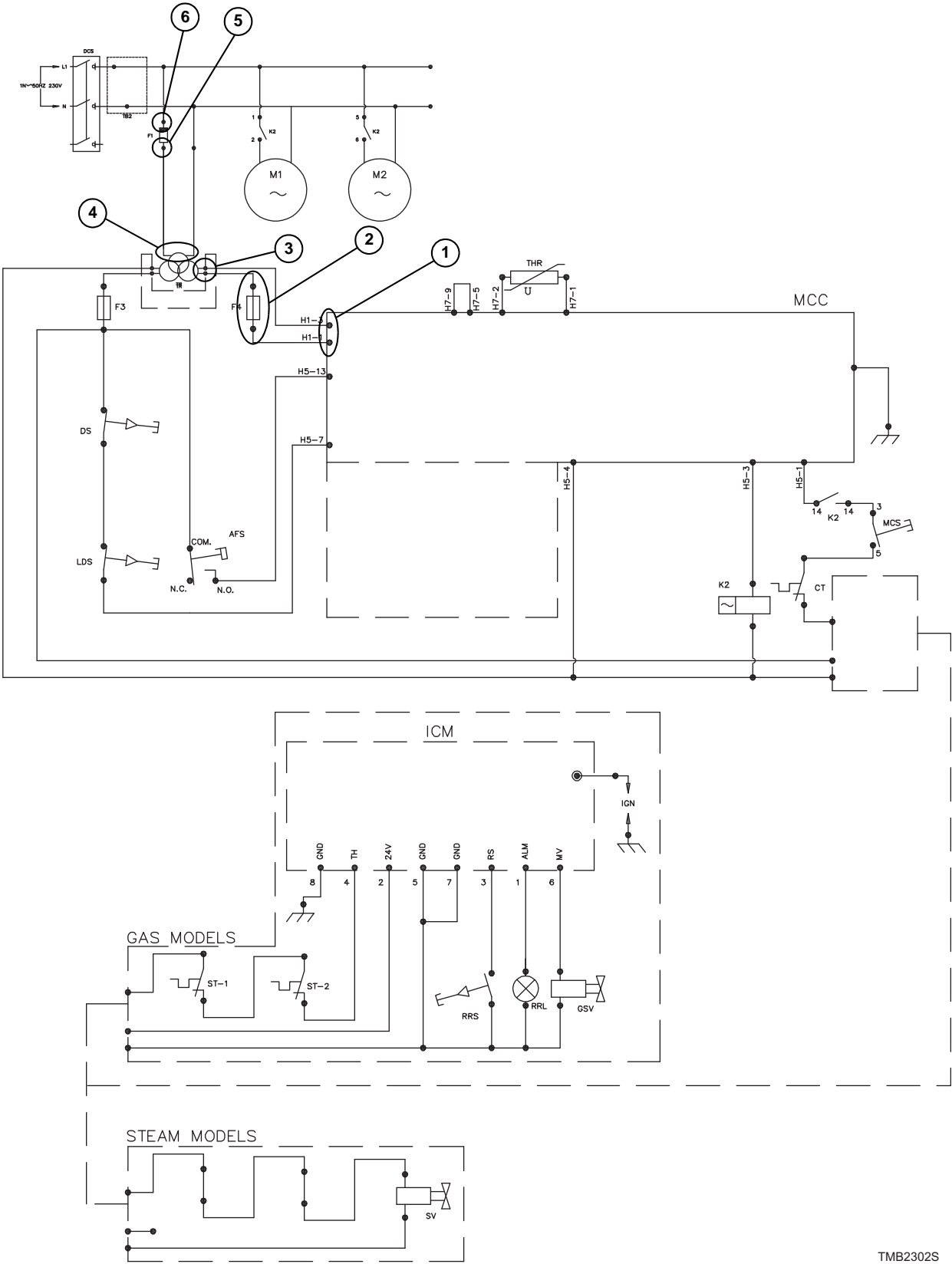
TMB2301S

## 52. CE Models No Display



TMB2288S

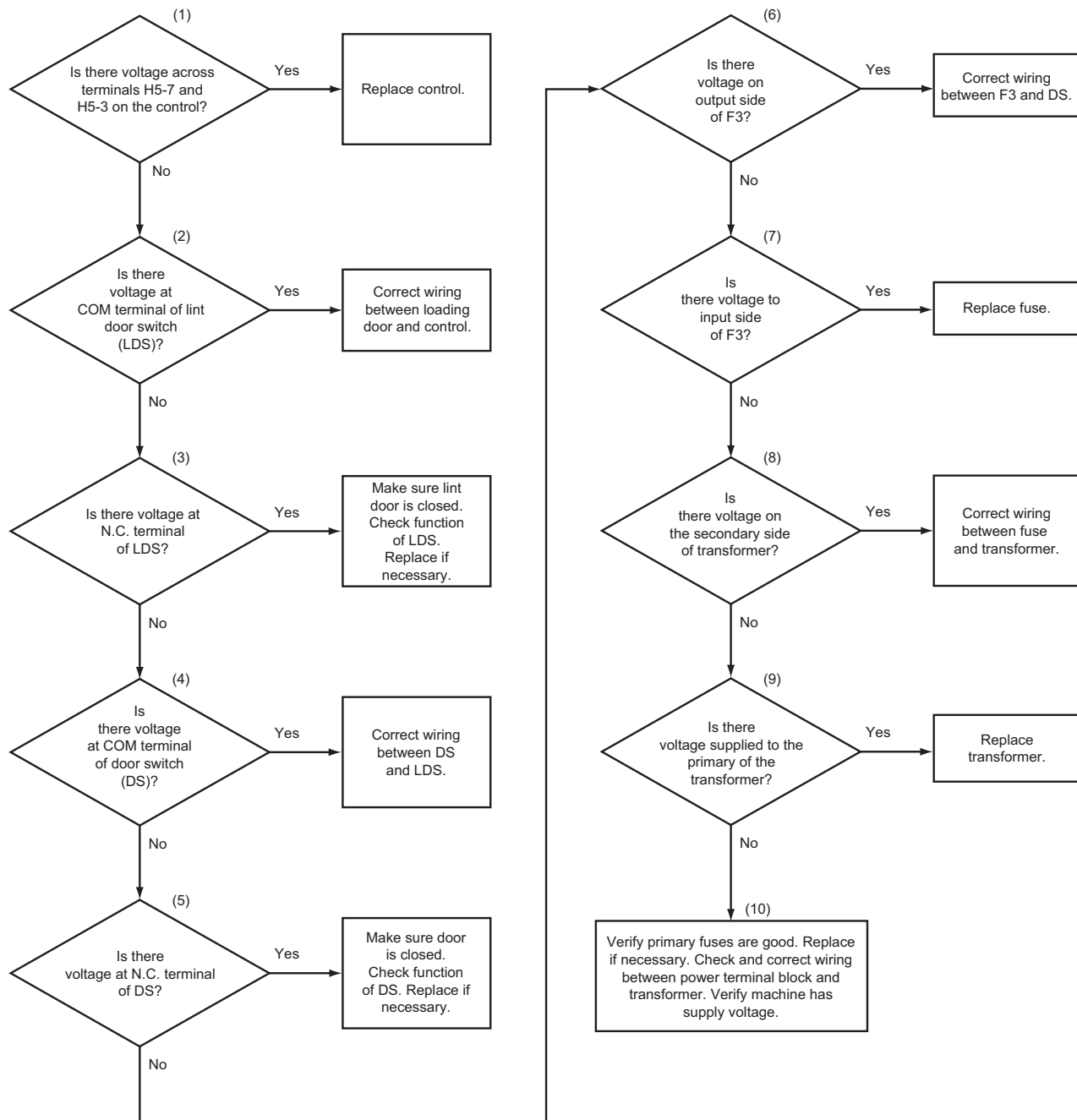
CE Models No Display



TMB2302S

## CE Models “Door Open” Indicator

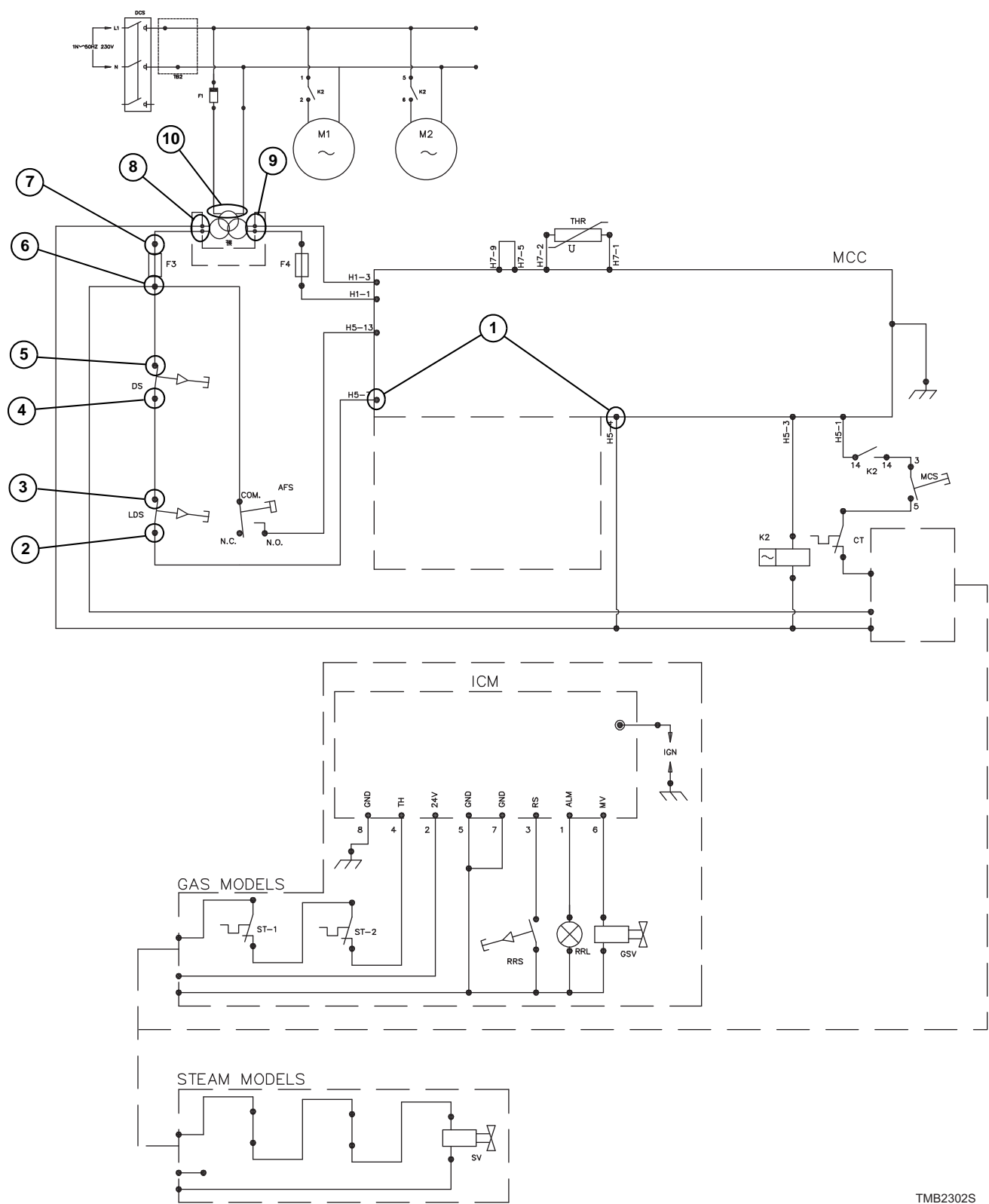
Note: All voltage checks are referenced to the transformer common unless otherwise stated.



TMB2289S



CE Models “Door Open” Indicator

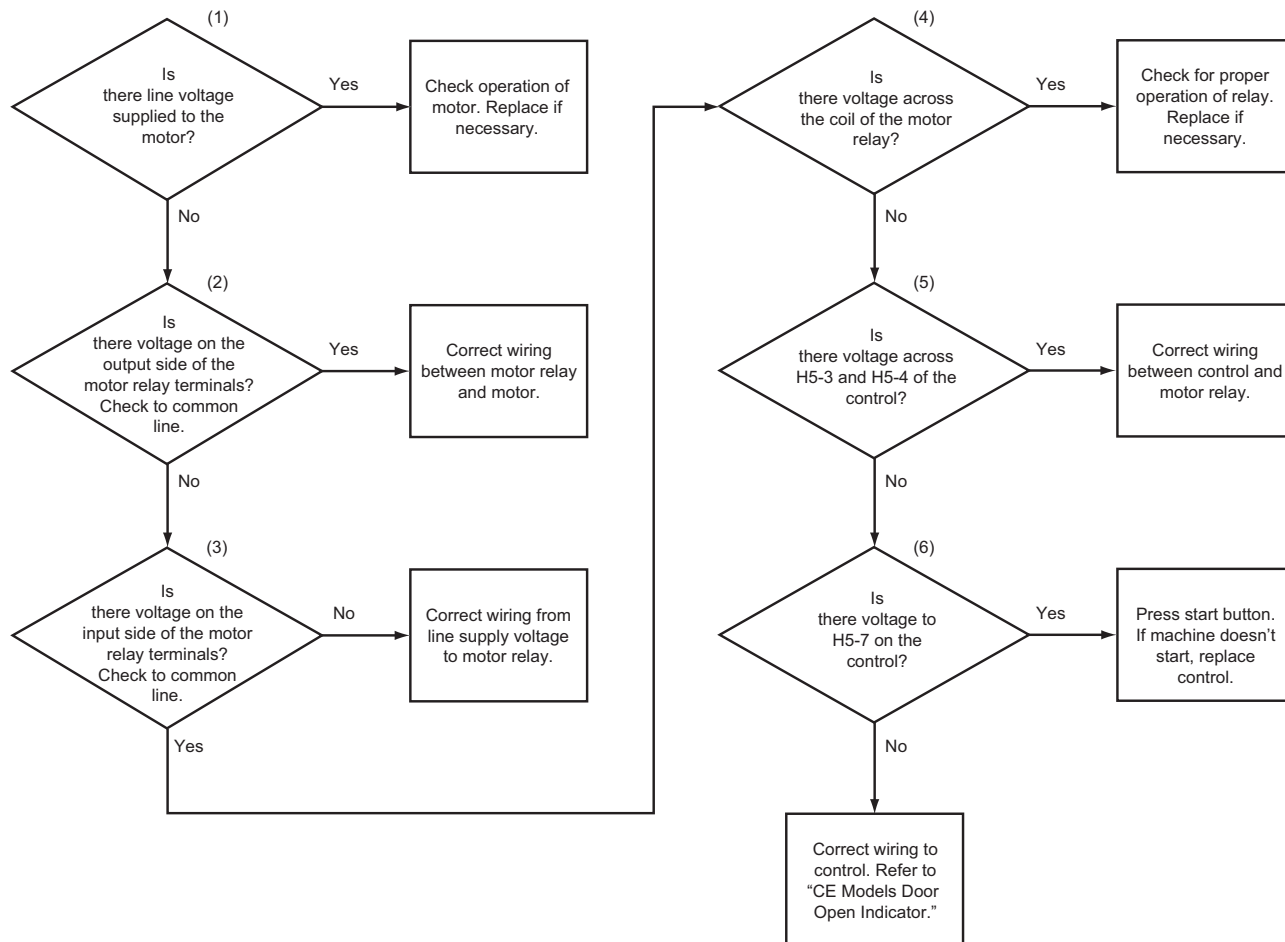


TMB2302S

## 53. CE Models No Start/Run

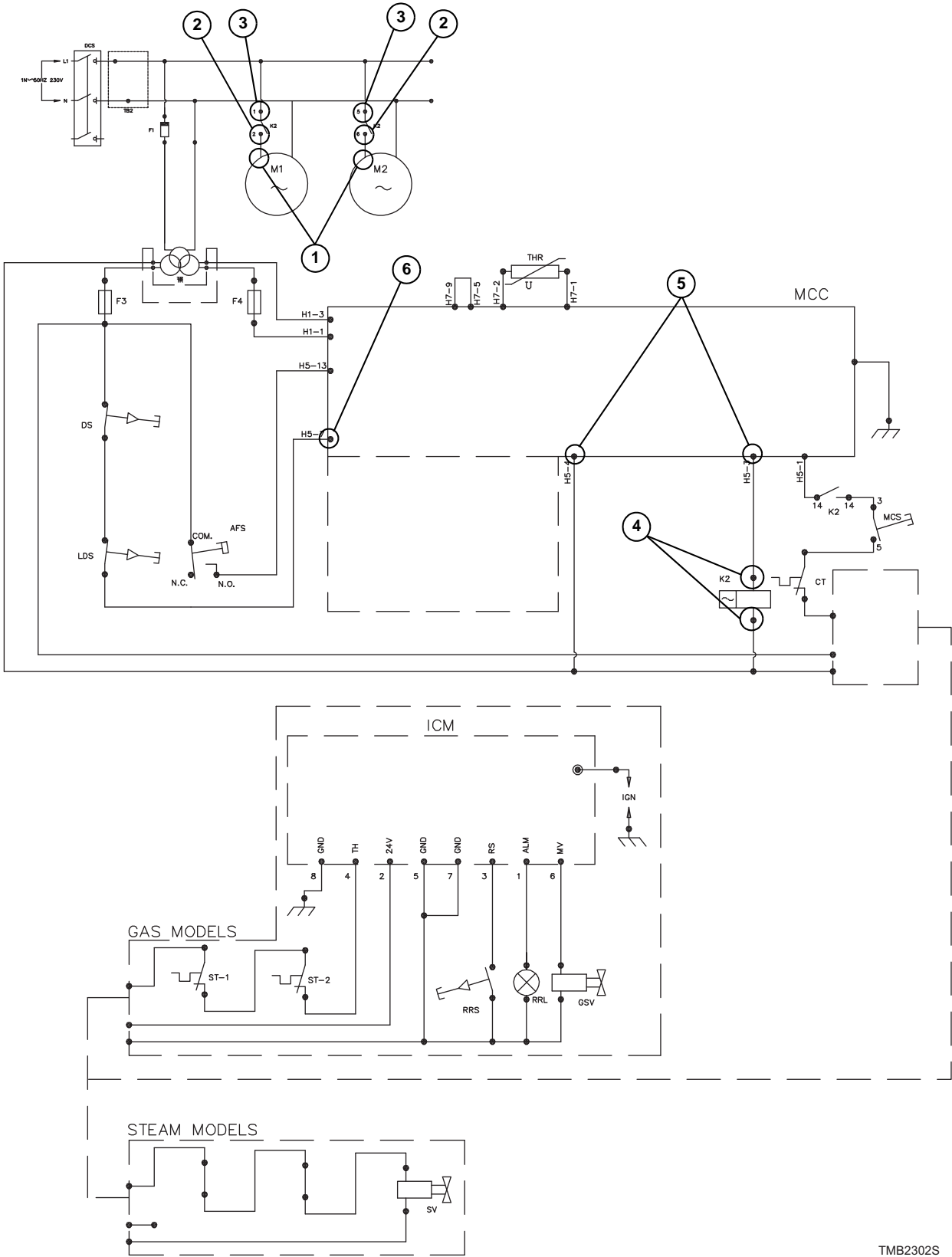
Note: Voltage checks referenced to transformer neutral unless otherwise stated.

Note: Common can be neutral or live wire depending on voltage and phase.



TMB2291S

CE Models No Start/Run

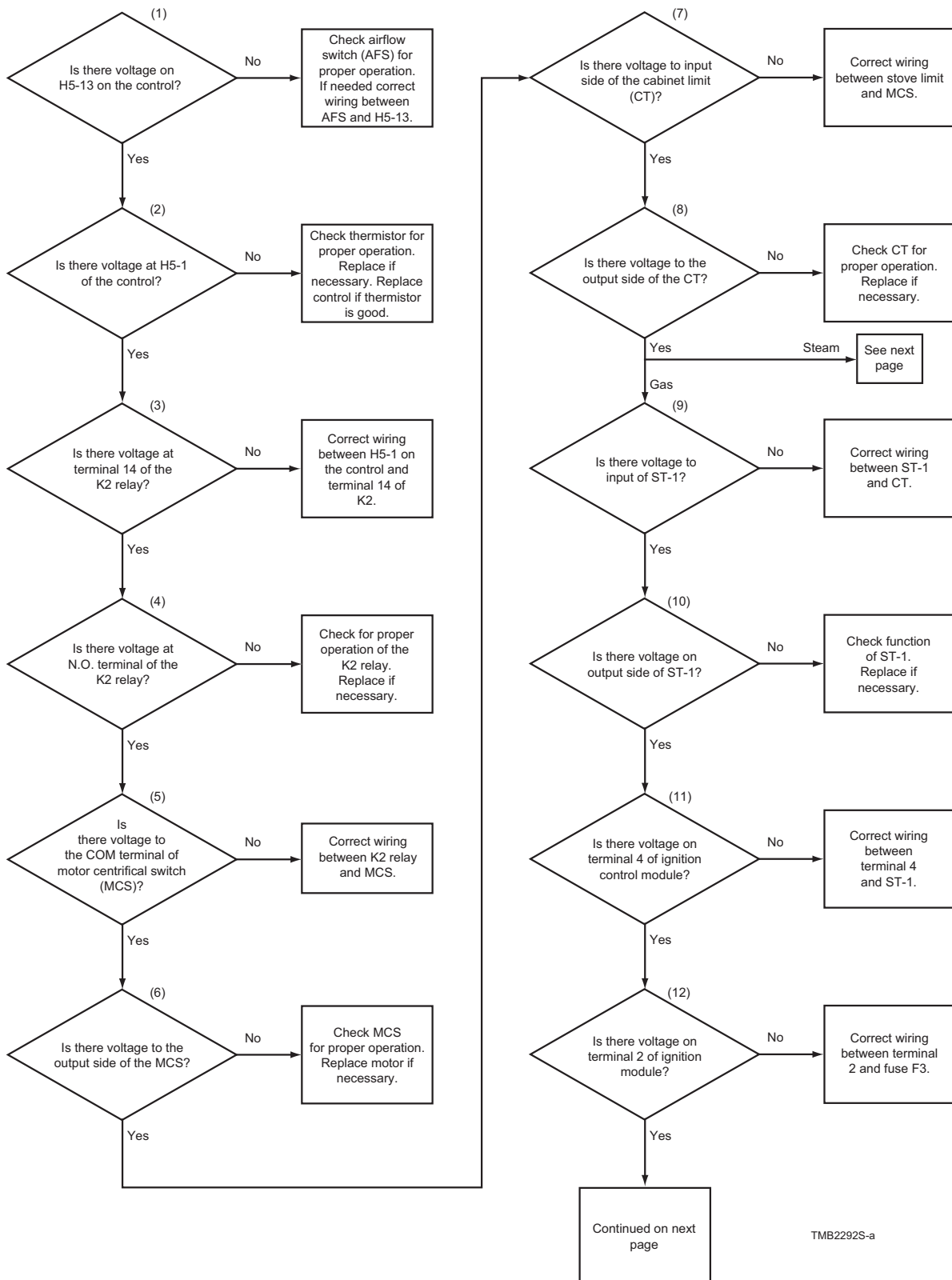


TMB2302S

## CE Models Will Not Heat – Gas/Steam

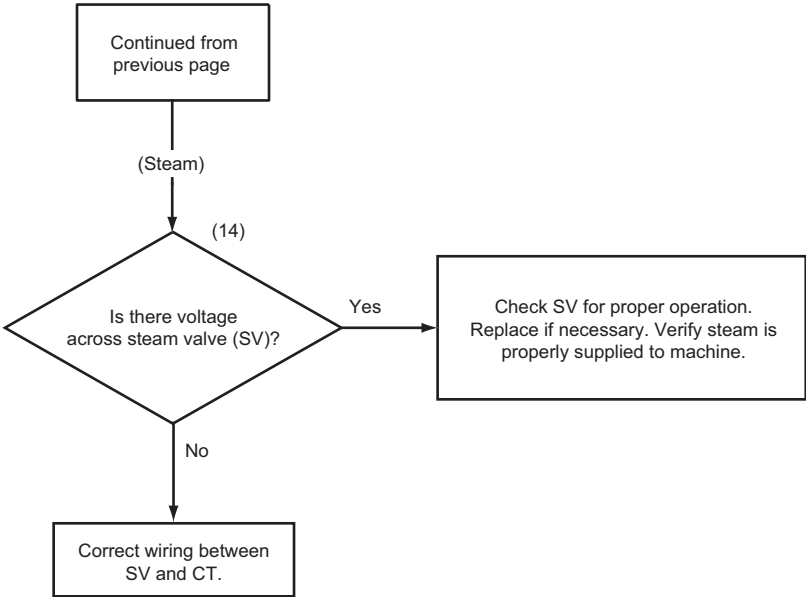
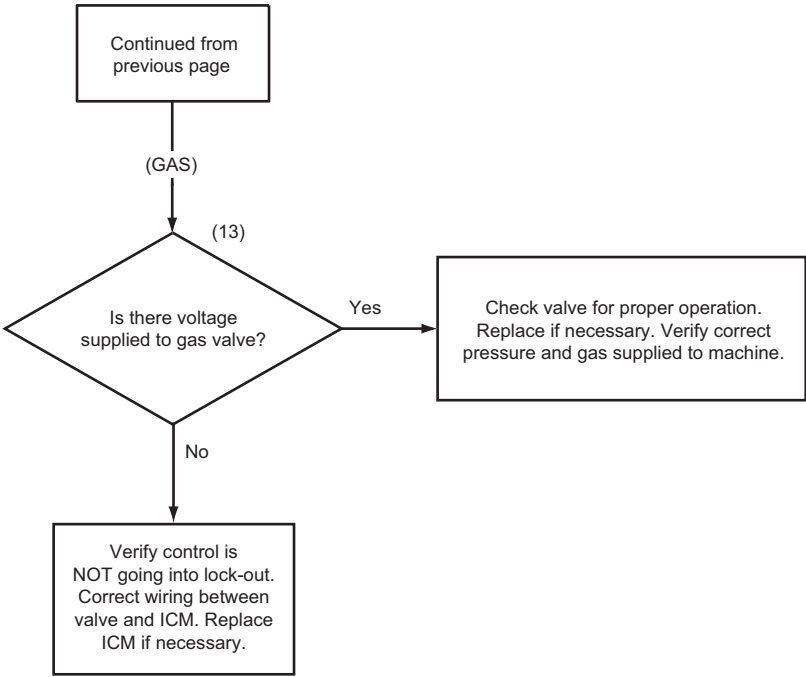
Note: Test conducted with unit running and calling for heat.

Note: Voltage checks referenced to neutral unless otherwise stated.



TMB2292S-a

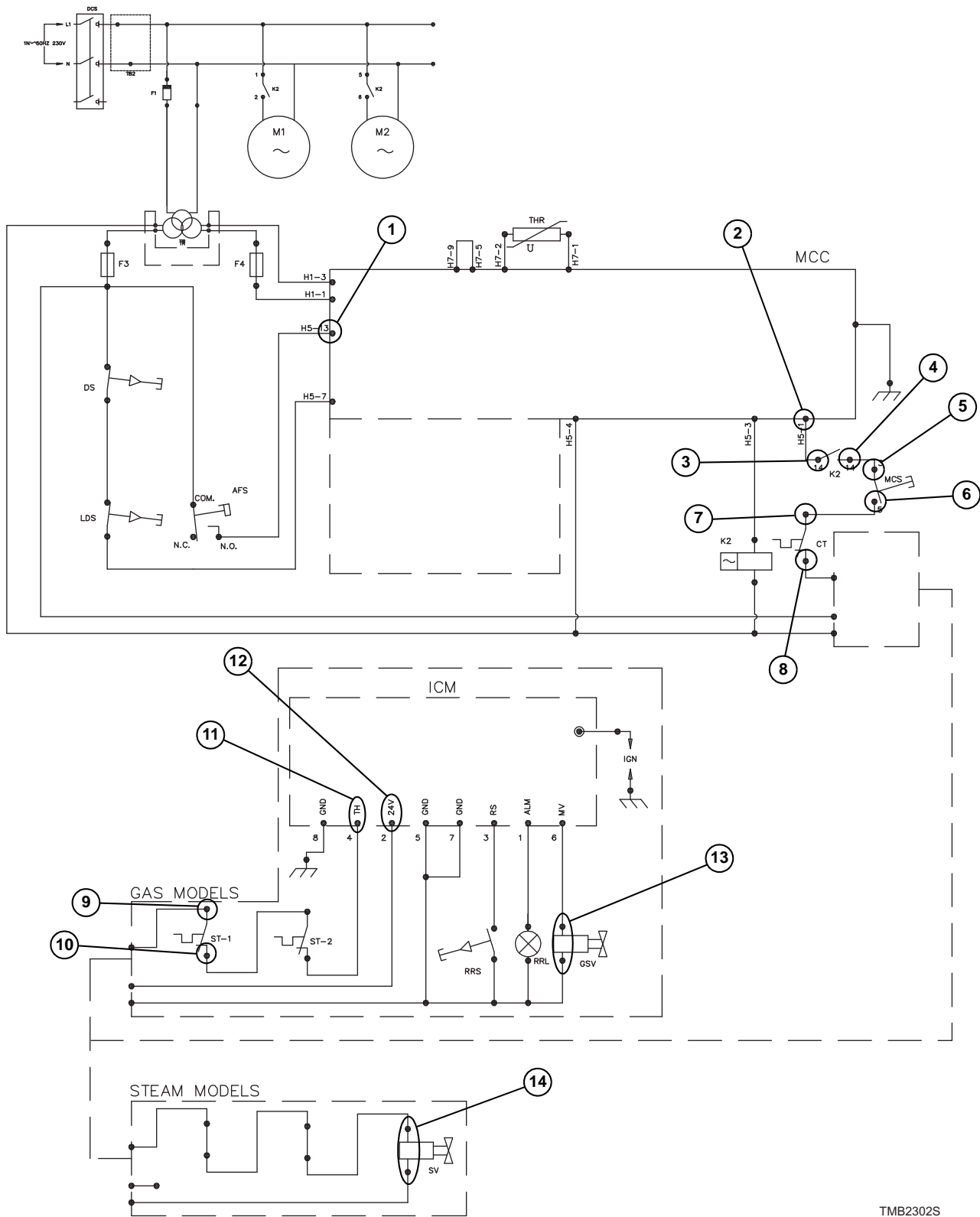
**53. CE Models Will Not Heat – Gas/Steam (continued)**



TMB2292S-b

**Please see following page for wiring diagram information.**

CE Models Will Not Heat – Gas/Steam

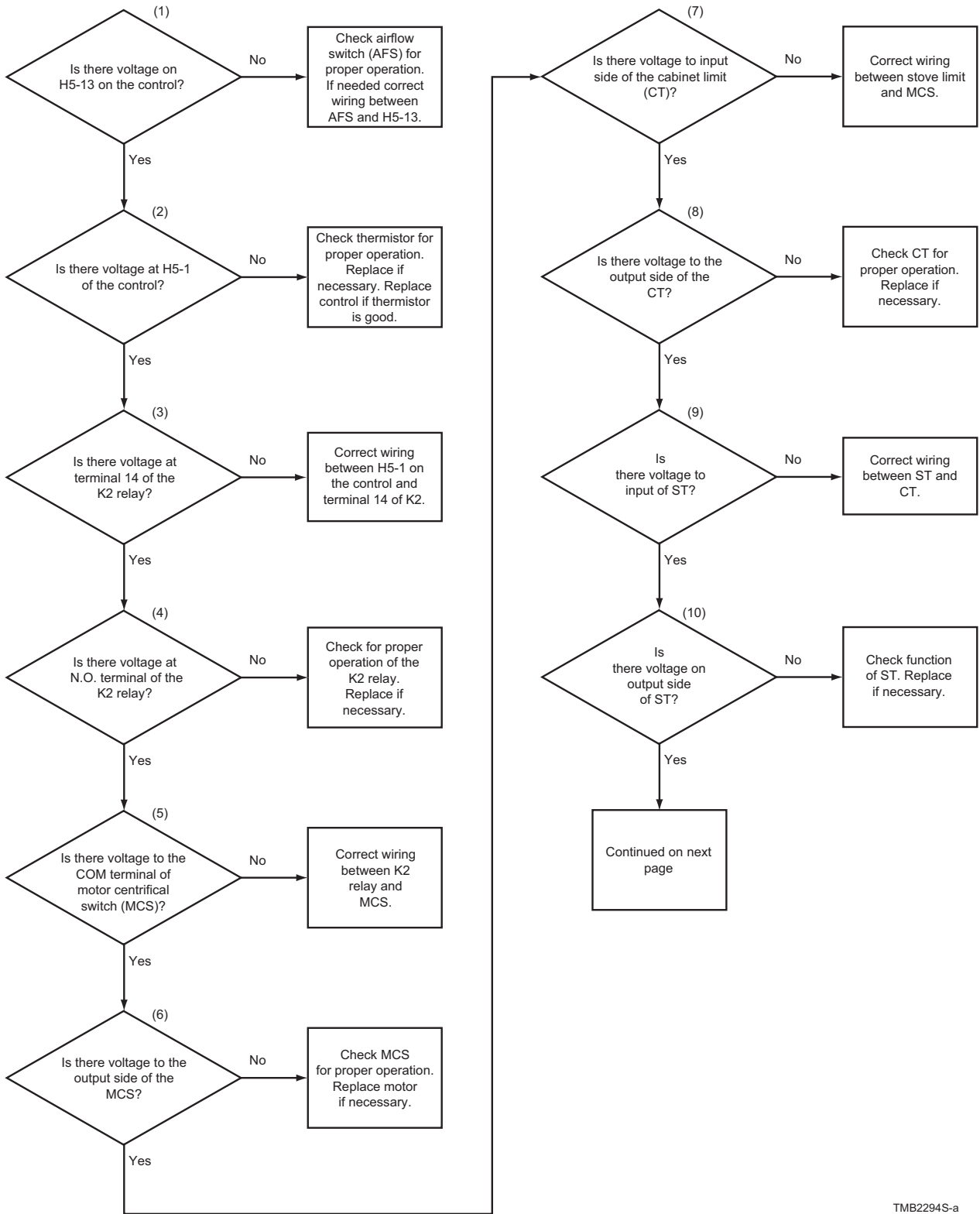


TMB2302S

# 54. CE Models Will Not Heat – Electric

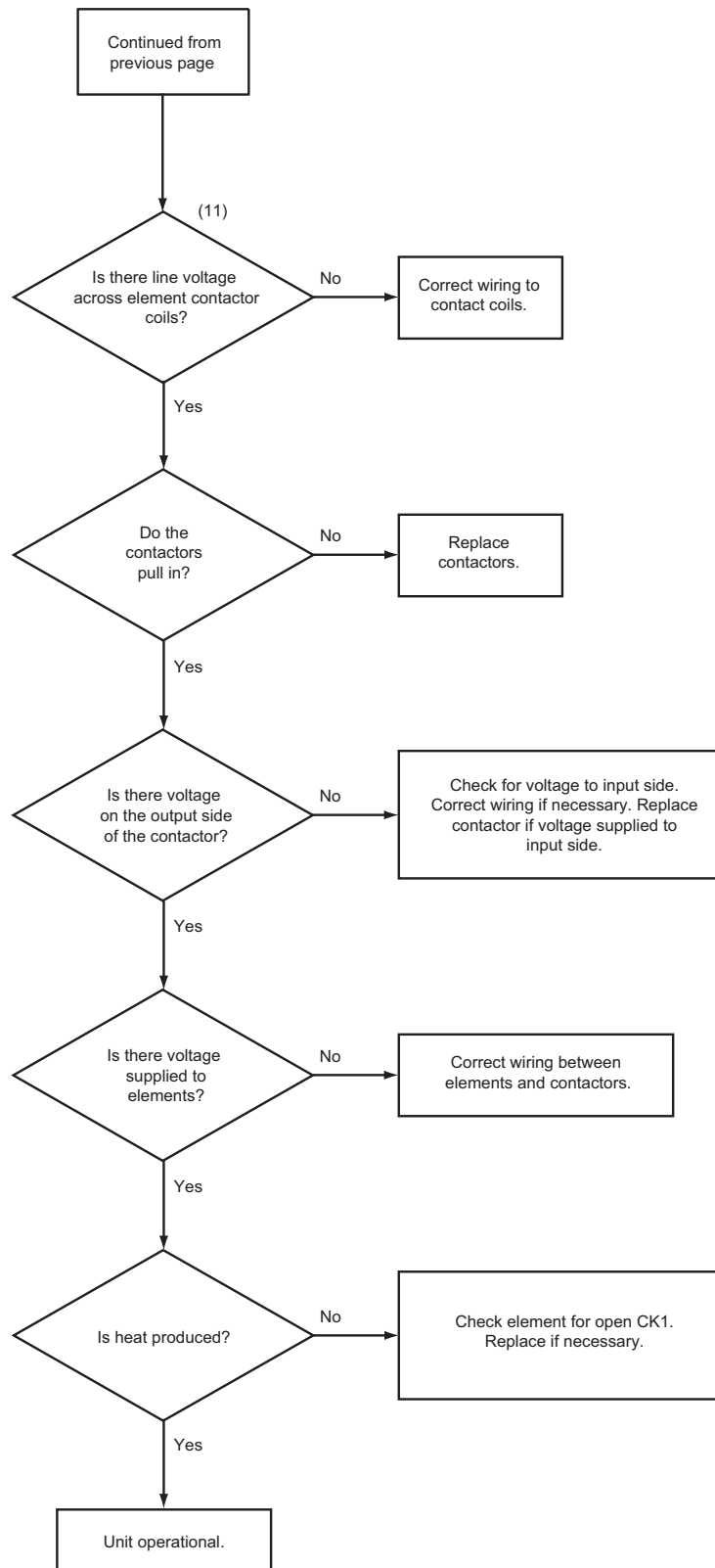
Note: Test conducted with unit running and calling for heat.

Note: Voltage checks referenced to neutral unless otherwise stated.



TMB2294S-a

## 54. CE Models Will Not Heat – Electric (continued)



TMB2294S-b



CE Models Will Not Heat – Electric

